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Vol. I TRANSCRIPT OF RECORD

Supreme Court of the United States

OCTOBER TERM, 1941

No. 37

THE CUNO ENGINEERING CORPORATION, PETITIONER,

US.

THE AUTOMATIC DEVICES CORPORATION

N WEIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE SECOND CIRCUIT

PETITION FOR CERTIORARI FILED MARCH 15, 1941.

CERTIORARI GRANTED APRIL 14, 1941.

SUPREME COURT OF THE UNITED STATES OCTOBER TERM, 1941

No. 37

THE CUNO ENGINEERING CORPORATION, PETITIONER,

vs.

THE AUTOMATIC DEVICES CORPORATION

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE SECOND CIRCUIT

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IN UNITED STATES CIRCUIT COURT OF APPEALS, SECOND CIRCUIT

STATEMENT IN COMPLIANCE WITH RULE 13, SECTION 4

- 1. Plaintiff, The Automatic Devices Corporation, is a corporation duly organized and existing under the laws of the state of Connecticut, and has its principal place of business at Bridgeport, Fairfield County, Connecticut. Defendant, The Cuno Engineering Corporation, is a corporation duly organized and existing under the laws of the state of Connecticut, and has its principal place of business at Meriden, New Haven County, Connecticut.
- 2. The complaint was filed on February 20, 1939. It was brought for infringement of the following letters patent of the United States: No. 1,736,544, granted on November 19, 1929, on the invention of H. E. Mead, for Cigar Lighter; No. 2,117,232, granted on May 10, 1938, on the invention of J. H. Cohen, for Cigar Lighter; and No. 2,140,311, granted on December 13, 1938, on the invention of J. H. Cohen, for Cigar Lighter. Plaintiff served a bill of particulars on March 27, 1939, asserting that claims 1, 2, 3 and 11 of Mead 1,736,544, claims 1, 2, 10, 16 and 18 of Cohen 2,117,232, and claims 3, 20 and 26 of Cohen 2,140,311 would be relied upon on final hearing.
 - 3. The answer of defendant was filed on April 10, 1939.
- 4. A motion of plaintiff for a preliminary injunction to restrain defendant from infringing upon claims numbered 2, 3, and 11 of patent in suit to Mead, No. 1,736,544, was filed September 7, 1939, and was presented to the Court on September 14, 1939. The said motion for preliminary injunction was denied on September 19, 1939.
- 5. The action was tried on final hearing by Honorable Carroll C. Hincks on November 2 and 3, 1939.
- [fol. 2] 6. No question was referred to a commissioner, a master, or a referee.
- 7. No arrest was made, bail taken, or property attached in connection with the action.

- 8. On May 13, 1940, a preliminary decision was filed.
- 9. On May 20, 1940, at 2:30 P. M. before Judge C. C. Hincks, arguments were heard with respect to the preliminary decision of the Court. Decision reserved.
- 10. On June 7, 1940, the final opinion of the Court was filed.
- 11. On June 19, 1940, judgment was signed and entered holding claims numbered 1, 2, 3, and 11 of patent to Mead, No. 1,736,544, if valid, not to be infringed and claims numbered 1, 2, 10, 16, and 18 of Cohen patent, No. 2,117,232 to be invalid, and claims numbered 3 and 20 of Cohen patent in suit, No. 2,140,311, to be invalid.
- 12. On August 22, 1940, notice of appeal from said judgment was served.

[fol. 3] In District Court of the United States, District of Connecticut

Civil Action, Docket No. 97

THE AUTOMATIC DEVICES CORPORATION, Plaintiff,

V

THE CUNO Engineering Corporation, Defendant
Complaint—Filed February 20, 1939
Equitable Relief Is Sought

Plaintiff, The Automatic Devices Corporation, for its complaint against defendant, The Cuno Engineering Corporation, alleges:

- 1. That plaintiff, The Automatic Devices Corporation, is a corporation duly organized and existing under the laws of the State of Connecticut, having a regular and established place of business at Bridgeport, Fairfield County, Connecticut, and that, upon information and belief, defendant, The Cuno Engineering Corporation, is a corporation duly organized and existing under the laws of the State of Connecticut, and has its principal and a regular and established place of business at Meriden, New Haven County, Connecticut.
- 2. That this suit is brought under the patent laws of the United States for infringement by defendant upon the following letters patent of the United States:

[fol	. 4	1
110		.,

Number	Name	Date	Title
1,736,544	H. E. Mead	Nov. 19, 1929	Cigar Lighter
2,117,232	J. H. Cohen	May 10, 1938	Cigar Lighter
2,140,311	J. H. Cohen	Dec. 13, 1938	Cigar Lighter

- 3. That on and prior to August 24, 1927, Herbert E. Mead was the inventor of new and useful improvements in Cigar Lighter; that on the 24th day of August, 1927, he duly filed in the United States Patent Office application for letters patent of the United States for said improvements; that said application was essigned Serial No. 215,236; that on the 19th day of November, 1929, Letters Patent of the United States No. 1,736,544 were duly and lawfully issued to S. T. Jessop Co., Inc., a corporation duly organized and then existing under the laws of the State of Illinois and having a place of business at Chicago, Cook County, Illinois, as assignee of the inventor, Herbert E. Mead, for improvements in Cigar Lighter; and that the invention of said letters patent has not been abandoned. Profert of said letters patent is hereby made.
- 4. That by mesne assignments, duly executed, delivered, accepted and recorded in the United States Patent Office, the invention of and said letters patent No. 1,736,544, together with the right to sue and recover for all past infringement thereon, were duly assigned to plaintiff on or about the 6th day of February, 1936, and that since said assignment and transfer plaintiff has been and still is the owner thereof. Profert of the said assignments is hereby made.
- 5. That or and prior to March 29, 1933, Joseph H. Cohen was the inventor of new and useful improvements in Cigar Lighter; that on the 29th day of March, 1933, he duly filed in the United States Patent Office application for letters [fol. 5] patent of the United States for said improvements; that said application was assigned Serial No. 663,402; that on the 10th day of May, 1938, letters patent of the United States No. 2,117,232 were duly and lawfully issued to plaintiff, as assignee of the inventor, Joseph H. Cohen, for an invention in Cigar Lighter; that the invention of said letters patent has not been abandoned; and that since said date plaintiff has been and still is the owner of said letters patent. Profert of said letters patent is hereby made.

- 6. That on and prior to July 23, 1932, Joseph H. Cohen was the inventor of new and useful improvements in Cigar Lighter; that on the 23rd day of July, 1932, he duly filed in the United States Patent Office application for letters patent of the United States for said improvements; that said application was assigned Serial No. 624,193; that a divisional application of said application for letters patent filed July 23, 1932, was filed as required by the United States Patent Office on the 2nd day of January, 1937; that this application was assigned Serial No. 118,838; that on the 13th day of December, 1938, letters patent of the United States No. 2,140,311 were duly and lawfully issued to the plaintiff, as assignee of the inventor, Joseph H. Cohen, for the invention in Cigar Lighter; that the invention of said letters patent has not been abandoned; and that since said date plaintiff has been and still is the owner of said letters patent. Profert of said letters patent is hereby made.
- 7. That on or about the 1st day of May, 1936, a nonexclusive license in writing was duly granted to and accepted by Casco Products Corporation, a corporation duly organized and existing under the laws of the State of Connecticut, and having its principal place of business at [fol. 6] Bridgeport, Fairfield County, Connecticut, to manufacture, use and sell devices embodying the invention of said letters patent No. 1.736,544, that under the terms and conditions of the said license agreement said licensee received and accepted a license under said letters patent Nos. 2,117,232 and 2,140,311, to manufacture, use and sell devices embodying the invention thereof, and that since said 1st day of May, 1936, said license has been and now is in full force and effect; that the inventions of said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311 are of great value, importance, benefit and advantage to plaintiff, its said licensee and to the public; that plaintiff, its predecessor and said licensee have expended large sums of money in making the inventions described and claimed in said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311 profitable to them and useful to the public; that plaintiff's said licensee has manufactured and sold devices embodying the inventions of said letters patent Nos. 1,736,544, 2,117,232 and 2.140.311 which have been introduced into extensive commercial use; that plaintiff's said licensee has created a great and increasing demand for devices embodying the

inventions of said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311; that plaintiff's said licensee is prepared, equipped and ready to supply the demand that has been created for such devices, and that the public has been given the benefit and advantage of the inventions of said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311. Profert of said license is hereby made.

- 8. That, on information and belief, defendant, The Cuno Engineering Corporation, well knowing the rights secured to plaintiff as aforesaid, without license or permission and in violation and willful infringement of the rights of the plaintiff in and to said letters patent Nos. 1,736,544, 2,117, [fol. 7] 232 and 2,140,311, after the grant of each of said letters patent, before the commencement of this suit, and within six (6) years prior thereto, did unlawfully manufacture, use and sell devices embodying the inventions of said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311 and will continue to do so unless enjoined in this Court; and that, unless said infringement is restrained by this Court, further and irreparable damage will be caused to plaintiff and its said licensee.
- 9. That the said licensee of plaintiff has placed the Statutory notice on all cigar lighters manufactured and sold by it embodying the invention of said letters patent No. 1,736,544, and that the defendant has been duly notified of its infringement upon said letters patent Nos. 1,736,554, 2,117,232 and 2,140,311, but, nevertheless, as plaintiff is informed and believes and therefore alleges defendant continued and now continues to infringe upon each of said letters patent since said notice, whereby defendant has continued to profit and the plaintiff has been damaged.

Wherefore, plaintiff prays for a decree holding that said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311 are good and valid in law, that plaintiff is vested with title to the same, that defendant has infringed upon said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311, that a permanent injunction, and a preliminary injunction during the pendency of this suit, be granted, restraining and enjoining defendant, its agents, attorneys, servants and employees, and all others acting by and under its direction or authority, its successors or assigns, from making or causing to be made, using or causing to be used, selling or causing to be

sold devices or parts thereof made according to and embody-[fol. 8] ing the inventions disclosed and claimed in said letters patent Nos. 1,736,544, 2,117,232 and 2,140,211, that an accounting of defendant's profits and plaintiff's damages because of defendant's infringement upon said letters patent Nos. 1,736,544, 2,117,232 and 2,140,311 be awarded to plaintiff, and that, because of the willful nature of defendant's infringement upon said letters patent, plaintiff's damages shall be increased in a sum not exceeding three (3) times the amount thereof, and that plaintiff be awarded costs.

The Automatic Devices Corporation, By (Sgd.) Arthur A. Johnson, President. (Sgd.) William E. Allen, Jr., Attorney for Plaintiff, 955 Main St., Bridgeport, Conn. (Sgd.) James T. Kline, Thomas J. Byrne, of Counsel.

Duly sworn to by Arthur A. Johnson, jurat omitted in printing.

[fol. 9] IN UNITED STATES DISTRICT COURT

PLAINTIFF'S BILL OF PARTICULARS—Filed March 28, 1939

The claims of the respective patents in suit which are infringed by defendant and upon which plaintiff intends to rely on final hearing follow:

Claims numbered 1, 2, 3 and 11 of Mead Patent No. 1,736,544,

Claims numbered 1, 2, 10, 16 and 18 of Cohen Patent No. 2.117.232, and

Claims numbered 3, 20 and 26 of Cohen Patent No. 2,140,311.

The Automatic Devices Corporation, By Thomas J. Byrne, Attorney.

Dated: March 27, 1939.

Copy received this 27th day of March, 1939.

R. S. Allyn, Attorney for Defendant.

[fol. 10] IN UNITED STATES DISTRICT COURT

Answer-Filed April 10, 1939

Defendant, The Cuno Engineering Corporation, for its Answer to the Complaint herein alleges:

1. Defendant admits it is a Connecticut Corporation and has a principal and a regular and established place of busi-

ness at Meriden, Connecticut, but Defendant is not advised as to the other allegations of Paragraph numbered "1" of the complaint and leaves the Plaintiff to its proof thereof.

- 2. Defendant admits this is a suit brought under the patent laws of the United States for alleged infringement of United States Letters Patent.
- 3. Defendant admits that Letters Patent of the United States No. 1,736,544 were issued to S. T. Jessop Co., Ind., as assignee of Herbert E. Mead on Nov. 19, 1929, for alleged improvements in Cigar Lighter but denies that said Letters Patent were duly and lawfully issued and further denies each and every other allegation in Paragraph numbered "3."
- 4. Defendant has no knowledge save by the Complaint as to the allegations contained in Paragraph numbered "4" and therefore denies the same and leaves the Plaintiff to its proof thereof.
- 5. Defendant admits that Letters Patent No. 2,117,232 were issued to Plaintiff as assignee of Joseph H. Cohen on May 10, 1938, for alleged improvements in Cigar Lighter but denies that said Letters Patent were duly and lawfully issued and further denies each and every other allegation in Paragraph numbered "5."
- [fol. 11] 6. Defendant admits that Letters Patent No. 2,140,311 were issued to Plaintiff as assignee of Joseph H. Cohen on December 13, 1938, for alleged improvements in Cigar Lighter but denies that said Letters Patent were duly and lawfully issued and further denies each and every other allegation in Paragraph numbered "6."
- 7. Defendant has no knowledge save by the Complaint as to the allegations contained in Paragraph numbered "7" and therefore denies the same and leaves the Plaintiff to its proof.
- 8. Defendant denies each and every allegation contained in Paragraph numbered "8."
- 9. Defendant admits it received a notice charging infringement of Letters Patent Nos. 1,736,544, 2,117,232 and 2,140,311 but has no knowledge as to the placing of the statutory notices on cigar lighters by Plaintiff's licensee

and denies each and every other allegation of Paragraph numbered "9."

10. Further answering, the Defendant avers that the alleged inventions or improvements described and claimed in said Letters Patent Nos. 1,736,544, 2,117,232 and 2,140,311 and each of them, and attempted to be patented thereby, and every material and substantial part thereof, do not embody any substantial variation or change from what belonged to the state of the art as it existed at the time of the alleged invention thereof by the inventors, and did not then involve the exercise of inventive faculty or constitute the subject matter of invention proper to be secured by the grant of Letters Patent within the meaning or intent of the statutes relating thereto. Said patents are therefore invalid.

[fol. 12] 11. Further answering, the Defendant avers that said Letters Patent Nos. 1,736,544, 2,117,232 and 2,140,311 referred to in the Complaint were and are wholly invalid and void because the alleged inventions, improvements and discoveries purported to be patented therein and every material and substantial part thereof were published, described and patented prior to the alleged invention or discovery thereof by said inventors, or more than two years prior to the filing date of the applications for said Letters Patent in and by the following Letters Patent and publications, to wit:

United States Letters Patent

Hammerstrom	No. 493,	380 Mar.	14, 1893
Burnett	972,	811 Oct.	18, 1910
Hadaway	1,046,	777 Dec.	10, 1912
Delano	Reissue 14,	842 Apr.	20, 1920
Morris	1,376,	154 Apr.	26, 1921
Hogel	1,433,	277 Oct.	24, 1922
Zecchini	1,437,	701 Dec.	5, 1922
Donle	1,492,	967 May	6, 1924
Cuno, et al.	1,556,	082 Oct.	6, 1925
Reid	1,565,	199 Dec.	15, 1925
Copeland	1,838,	363 Dec.	29, 1931
	(Application	filed Mar.	9, 1927)
Copeland	1,844,	206 Feb.	9, 1932
	(Application	filed Apr.	18, 1927)
Wolfson	1,980,	157 Nov.	6, 1934
	(Application	filed Apr.	10, 1931)

Foreign Patents

S. Smith and Sons and F. W. Miller and F. Miller British No. 285,200 Application date: Complete accepted:

Dec. 14, 1926 Feb. 16, 1928

[fol. 13]

Publications

Provisional Specification No. 31,643 filed Dec. 14, 1926; and Provisional Specification No. 14,563 filed May 31, 1927, in the British Patent Office, London, England, by S. Smith and Sons, of London, England, and F. W. Miller and F. Miller, both of Warwickshire, England, for patent on Automatic Cut-out for Electric Cigar and Cigarette Lighter which eventuated in British patent No. 285,200; and also by other patents and publications not now known to the Defendant but which, when ascertained, the Defendant prays leave to insert herein by amendment to this Answer.

- 12. Further answering, on information and belief, the Defendant avers that said Letters Patent Nos. 1,736,544, 2,117,232 and 2,140,311 referred to in the Complaint, and each of them, were and are wholly invalid and void because the inventors thereof and each of them were not the original, sole and first inventors or discoverers of the alleged inventions, improvements or discoveries purported to be patented therein, but that the same and every substantial and material part thereof were, prior to the alleged invention or discovery thereof by said inventors, known and used by others in this country, to wit, the patentees of the patents listed in Paragraph numbered "11" hereof and also by other persons and corporations whose names are not now known to the Defendant but which, when ascertained, Defendant prays leave to insert herein by proper amendment.
- 13. Further answering, the Defendant avers that the description and claims of the alleged improvements in said Letters Patent and each of them is not in such full, clear, [fol. 14] concise and exact terms so as to enable any person skilled in the art or science to which they pertain or with which they are most nearly connected, to make, construct, compound and use the same.
- 14. Further answering, the Defendant avers that all of the claims of said Letters Patent are ambiguous, uncer-

tain, indefinite, misleading and obscure and fail to distinctly point out and distinctly set forth the part, improvement or combination which the inventors claim as their inventions or discoveries, as is required by the statutes in such cases made and provided and said letters patent are therefore invalid.

- 15. Further answering, the Defendant avers that said Letters Patent and each of them were unlawfully and improperly issued and therefore are invalid because neither alleged invention was or is sufficiently useful and important under the requirements of Section 4893 to justly entitle the applicant to a patent under the law; and that the Commissioner of Patents exceeded his authority in issuing said letters patent and said letters patent and each of them are therefore void.
- 16. Further answering, the Defendant avers that each of the claims of the Cohen patents Nos. 2,117,232 and 2,140,311 in suit is invalid as directed to an unpatentable aggregation, the invention if any residing solely in the construction of the sockets.
- 17. Further answering, the Defendant avers, upon information and belief, that while the applications for the said Letters Patent were pending in the United States Patent Office, the applicants so limited and confined the claims of said applications voluntarily and under the requirements of the Commissioner of Patents, that the Plain-[fol. 15] tiff herein cannot now seek for or obtain constructions for such claims sufficiently broad to cover any device made, used, or sold by this Defendant.
- 18. Further answering, the Defendant avers, upon information and belief, that said Letters Patent and the claims thereof should be given a very narrow construction because whatever of commercial use has attended the manufacture and sale of Plaintiff's devices is due not to the patentees' work but to the work of others including extensive advertising, automatic machine production, aggressive sales efforts and precision workmanship and causes other than the disclosures of the patents in suit.
- 19. Further answering, the Defendant avers upon information and belief that Letters Patent No. 2,140,311 issued to Joseph H. Cohen and all the claims thereof are in-

valid and void for double patenting because a device substantially identical in character with a device purported to be covered by the claims of said Letters Patent No. 2,140,311 was previously patented to said patentee, Joseph H. Cohen, in Letters Patent No. 2,117,703 issued May 17,1938; and that any invention disclosed in Patent No. 2,117,703 and not claimed therein was abandoned.

- 20. Further answering, the Defendant avers that said Letters Patent Nos. 2,117,232 and 2,140,311 are invalid and void because the patentee Cohen purposely delayed the issuance of said Letters Patent and kept the applications pending in the United States Patent Office a great many years for the purpose of placing obstacles in the path of competition and thus stifling rather than promoting the useful arts.
- 21. Further answering, the Defendant avers that the Letters Patent in suit are not infringed because Defend-[fol. 16] ant's device is not the equivalent or substantial equivalent of anything described and claimed in any of said Letters Patent.
- 22. Defendant further avers that Plaintiff is not entitled to any of the relief prayed for in the Complaint, or any other relief against Defendant.

Wherefore, Defendant prays that the Complaint be dismissed with reasonable costs and disbursements, and that Defendant may have such further and other relief as to this Honorable Court may seem equitable.

Dated, April 8th, 1939.

- The Cuno Engineering Corporation, Defendant. By (Sgd.) Charles H. Cuno, President.
- (Sgd.) Clarence W. Bronson, Attorney for Defendant, 129 Church Street, New Haven, Conn.
- (Sgd.) Robert S. Allyn, of Counsel, 41 Park Row, New York City, N. Y.
- [fol. 17] Duly sworn to by Charles H. Cuno. Jurat omitted in printing.

[fol. 18] IN UNITED STATES DISTRICT COURT, DISTRICT OF

[Title omitted]

STIPULATION AND ORDER AMENDING ANSWER—Filed October 4, 1939

It is hereby Stipulated and Agreed by and between the attorneys for the parties herein that paragraph 14 of the Answer of defendant shall be amended by inserting in line 2 before "said," each of; in the same line before "are" the words in suit shall be inserted; and in line 7 of the same paragraph the words "the statutes" shall be erased and in place thereof substituted the words Section 4888 of the Revised Statutes.

It is further stipulated the Answer shall be further amended by adding the following paragraphs:

- 23. Defendant further avers that letters patent No. 1,736,544 issued to Mead and particularly claims 2, 3 and 11 thereof are invalid and void because the alleged inventions purported to be patented therein were invented by Francis D. Copeland, of San Francisco, California, prior to the dates of the inventions purported to be patented by said claims of said letters patent, according to the Copeland letters patent No. 1,844,206 filed April 18, 1927.
- 24. Defendant further avers that letters patent No. 1,736,544 issued to Mead and particularly claim 11 thereof are invalid and void because the alleged invention purported to be patented therein was invented by Joshua M. Morris, [fol. 19] of Rochester, New York, prior to the date of invention purported to be patented by said claim of said letters patent, according to the Morris letters patent No. 1,376,154 filed October 2, 1919.
- 25. That the application for letters patent No. 2,140,311 as originally filed on July 23, 1932, contained no allowable claims therein sufficiently broad to embrace defendant's cigar lighters complained of, and that more than two years subsequent to the date of filing of said application on July 23, 1932, a divisional application was filed

and claims Nos. 3, 20 and 26 of said letters patent No. 2,140,311, were added to said application in an effort to embrace defendant's type of cigar lighters; that subsequent to the date of filing of said application on July 23, 1932, and prior to the date when said claims Nos. 3, 20 and 26 were added to the application, defendant's competitor Sinko Tool and Manufacturing Co., manufactured and sold automatic cigar lighters and it and defendant acquired continuous rights which are antagonistic to the rights plaintiff seeks to enforce here and because of that fact intervening rights arose in favor of defendant and against the plaintiff, which rights have been at all times since and are now available to defendant whereby plaintiff should not allege infringement of said claims by defendant.

26. Defendant further avers that letters patent No. 2,140,-311 issued to Coben and particularly claims Nos. 3, 20 and 26 thereof are invalid and void because new matter had been added subsequent to the filing of the original application on July 23, 1932, and because the claims thereof and particularly claims Nos. 3, 20 and 26 cover and embrace claimed subject matter materially and substantially different from the inventions disclosed and embraced in the original application as filed on July 23, 1932.

[fol. 20] 27. Further answering defendant avers, upon information and belief, that while the application for letters patent No. 2,140,311 was pending in the United States Patent Office the applicant inserted certain amendments and limitations in the claims now numbered "20" and "26" and possibly other claims of said letters patent, which limitations Plaintiff now seeks to eliminate by construction in order to broaden out said claims to cover any device made, sold or used by Defendant.

28. Further answering defendant avers, upon information and belief, that while the application for letters patent No. 2,117,232 was pending in the United States Patent Office the applicant inserted certain amendments and limitations in the claim now numbered "10" and possibly other claims of said letters patent, which limitations Plaintiff now seeks to eliminate by construction in order to broaden

out said claims to cover any device made, sold or used by Defendant.

(Sgd.) James T. Kline, George F. Smyth, Attorneys for Plaintiff.

Dated, New York, N. Y., Sept. 26, 1939.

(Sgd.) Clarence W. Bronson, Attorney for Defendant.

(Sgd.) R. S. Allyn, H. R. Johns, of Counsel for Defendant.

Thomas J. Byrne, of Counsel for Plaintiff.

It is so Ordered: (Sgd.) C. C. Hincks, United States District Judge.

[fol. 21] IN UNITED STATES DISTRICT COURT, DISTRICT OF CONNECTICUT, NEW HAVEN, CONNECTICUT

November 2, 1939, 10:30 A. M.

Civil Action, Docket No. 97

THE AUTOMATIC DEVICES CORPORATION, Plaintiff, against

THE CUNO ENGINEERING CORPORATION, Defendant

Statement of Evidence

Before Honorable Carroll C. Hincks, District Judge

APPEARANCES:

For the Plaintiff: James T. Kline, Esq., and George F. Smyth, Esq., Attorneys for Plaintiff, 945 Main Street, Bridgeport, Connecticut; Cooper, Kerr & Dunham, Esquires, 233 Broadway, New York, by Thomas J. Byrne, Esq., and Henry M. Huxley, Esq., 38 South Dearborn Street, Chicago, of Counsel.

[fol. 22] For the Defendant: Clarence W. Bronson, Esq., and Charles M. Lyman, Esq., Attorneys for Defendant, 129 Church Street, New Haven, Connecticut; Robert S. Allyn, Esq., 41 Park Row, New York, and H. R. Johns, Esq., of Counsel.

Discussion

Mr. Byrne: May I have the file of the case, please? There are certain stipulations which we want to offer, if we may. First let me state, if your Honor please, so that we will have it together in the record at one place, that we stand upon claims numbered 1, 2, 3 and 11 of the Mead patent 1,736,544 in suit, and upon claims 3 and 20 of Cohen patent 2,140,311, and claims numbered 1, 2, 10, 16 and 18 of the Cohen patent 2,117,232. We are not standing upon claim numbered 26 of Cohen patent 2,140,311. We believe it is unnecessary to trouble the Court with that claim, although we did mention that claim in a bill of particulars.

The Court: These long numbers always bewilder me. May I suggest that we agree on referring to the Cohen patents

as the first and second?

Mr. Byrne: Surely, your Honor.

The Court: Which shall we call the first?

Mr. Byrne: Let us call the first patent No. 2,140,311.

The Court: Why do we call that first?

Mr. Byrne: Filed first, if your Honor please.

The Court: Very well.

Mr. Byrne: The Automatic Devices Corporation, plaintiff, is a Connecticut corporation, and the defendant, The Cuno Engineering Corporation, is also a Connecticut corfol. 23] poration. That is a subject of stipulation between counsel. It was also stipulated between counsel as to the construction of devices of the defendant, and in the stipulation they are referred to: Fig. 1, Fig. 2, Figs. 3, 4, and 5, with respect to Cuno Automatic Lighter, February, 1939. They are referred to as Exhibit 1 and I ask that these three drawings be marked as Exhibit 1.

The Court: Very well.

Mr. Byrne: Those three together, please. You can mark it afterwards, just as you like. The three together. Plaintiff's Exhibit 1, three drawings.

(Plaintiff's Exhibit 1: Three drawings of Cuno Automatic Cigar Lighter.)

Mr. Byrne: I also offer in evidence as exhibits 1A, 1B and 1C, three drawings of the device of the defendant which are covered by the stipulation, and request that they be given the numbers exhibits 1A, 1B and 1C, respectively.

(Plaintiff's Exhibits 1-A, 1-B, and 1-C: Three drawings of Cuno Automatic Cigar Lighter.)

Mr. Byrne: Covered by the stipulation is a cigar lighter of the manufacture of the defendant which is there referred to as Exhibit 2. I ask that that be marked Plaintiff's Exhibit 2.

(Plaintiff's Exhibit 2: Cigar lighter manufactured by the defendant.)

Mr. Byrne: Attached to the stipulation that I have referred to are copies of licenses from Automatic Devices Corporation, the plaintiff, to Casco Products Corporation, a Connecticut corporation referred to by Mr. Allyn, and I offer them and ask that they be marked Exhibit 3, the two licenses.

(Plaintiff's Exhibit 3: License agreement, May 1, 1936, between Automatic Devices Corporation and Casco Products Corporation; license agreement, February 23, 1939, [fol. 24] between Automatic Devices Corporation and Casco Products Corporation.)

Mr. Byrne: I offer in evidence a copy of the Mead patent in suit, 1,736,544, and ask that that be marked Exhibit 4.

(Plaintiff's Exhibit 4: Copy of Mead patent No. 1,736,-544.)

Mr. Byrne: I also offer in evidence a copy of the first Cohen patent No. 2,140,311 and ask that that be marked Exhibit 5.

(Plaintiff's Exhibit 5: Copy of the first Cohen patent, No. 2,140,311.)

Mr. Byrne: I also offer in evidence a copy of the second Cohen patent, patent in suit, No. 2,117,232, and ask that it be marked Plaintiff's Exhibit 6.

(Plaintiff's Exhibit 6: Copy of second Cohen patent in suit, No. 2,117,232.)

Mr. Byrne: I suggest, Mr. Reporter, that you copy into the record at this place the stipulation to which I have been referring, so that we will have it at one place, because there are a number of other matters regarding soft copies of patents, etc., which pertain particularly to the other side those first four pages. (The stipulation referred to is as follows):

[fol. 25]

[Title omitted]

STIPULATION AS TO CERTAIN FACTS

"The parties to the above entitled action, by their attorneys, hereby stipulate as follows:

- 1. That regular printed copies or photostatic reproductions of the specifications and drawings of United States and foreign Letters Patent, or any printed publications set up in the pleadings, or any other publication of which thirty (30) days' notice has been given, shall be admitted, subject to correction of errors, as satisfactory proofs of such letters patent and printed publications, without certification, and that the printed dates of filing, sealing, publication, or delivery, appearing thereon shall be taken, subject to correction of errors, as establishing such dates; and that, unless evidence to the contrary shall be introduced, the descriptive matter (other than the claims) and the drawings of United States letters patent shall be taken to be the same as the descriptive matter (other than the claims) and the drawings of the application as originally filed, and that either party may introduce evidence to correctly show what the [fol. 26] descriptive matter and drawings of any United States letters patent were as originally filed.
- 2. That the corporate status of plaintiff is as alleged in paragraph numbered 1 of the complaint.
- 3. That, prior to the filing of the complaint in this action, the plaintiff was and now is the owner of the entire right, title and interest in and to United States letters patent No. 1,736,544, issued November 19, 1929, to Herbert E. Mead, assignor to S. T. Jessop Co., Inc., of Chicago, Illinois; No. 2,117,232, issued May 10, 1938, to J. H. Cohen, assignor to the plaintiff herein, and No. 2,140,311, issued December 13, 1938, to J. H. Cohen, assignor to the plaintiff herein.

That the entire right, title and interest in and to the Mead patent No. 1,736,544 from and after the date of issuance was as follows: On April 25, 1934, S. T. Jessop Co., Inc., assigned the entire right, title and interest in and to said letters patent, together with all right to sue for and recover damages and profits arising out of past and future infringe-

ments, to Paul R. Kirchner, of New York, N. Y.; on May 3, 1934, the said Kirchner assigned all right, title and interest in and to said letters patent No. 1,736,544, together with the right to sue for and recover all damages and profits on account of past and future infringements, to Casco Products Corporation, a corporation of Connecticut; on October 29, 1934, said Casco Products Corporation assigned all right, title and interest in and to said letters patent No. 1,736,544, together with all right to sue for and recover damages and profits on account of past and future infringements, to Joseph H. Cohen, of Bridgeport, Connecticut; on February 6, 1936, said Joseph H. Cohen assigned all right, title and interest in and to said letters patent to the plaintiff herein; [fol. 27] and on May 1, 1936, The Automatic Devices Corporation granted unto Casco Products Corporation, a corporation of Connecticut, having its principal place of business at Bridgeport, Connecticut, a non-exclusive right and license to manufacture, use and/or sell throughout the United States and territories thereof, and the Dominion of Canada, automatic cigar lighters embodying the inventions of said letters patent No. 1,736,544, and embodying the inventions of any applications for patent on automatic lighters or patents eventuating thereon, then owned, or at any time thereafter owned or controlled by the plaintiff herein, to the full end of the term or terms for which said patents or reissues or extensions thereof have or shall be granted, according to the two license agreements between plaintiff and said Casco Products Corporation, a copy of each of which is attached hereto.

- 4. That, prior to the filing of the complaint herein, and within six years prior thereto and subsequent to the issuance of letters patent No. 1,736,544, No. 2,117,232 and No. 2,146,311 in suit, the defendant manufactured and offered for sale cigar lighters, exemplified by the drawings attached hereto and marked 'Cuno Automatic Cigar Lighter February 1939,' and the specimen of cigar lighter submitted herewith and marked 'Plaintiff's Exhibit 2,' and the drawings attached hereto and marked 'Exhibit 1A,' 'Exhibit 1B' and 'Exhibit 1C,' exemplifying what defendant has made and sold since the filing of the complaint herein.
- 5. That during the prosecution of the Mead patent No. 1,736,544 in the Patent Office, the Examiner referred to,

as prior art, patents to Metzger No. 1,622,334 and Harley No. 852,326 and no other prior art. During the prosecu-[fol. 28] tion of Cohen No. 2,140,311, the Examiner referred to patents to Mead No. 1,736,544, Cohen No. 1,944,925, Ashton No. 2,060,783, Ashton No. 2,084,966, the British patent to Rupps No. 298,073, Wolfson, et al. No. 1,732,784, Copeland No. 1,844,206, and no other prior art. During the prosecution of Cohen No. 2,117,232, the Examiner referred to patents to Adams No. 1,373,583, Morris No. 1,376,154, Langos No. 1,697,686, Mead No. 1,736,544, Mahan No. 1,757,255 and no other prior art.

Signed, James T. Kline, George F. Smyth, Attorneys

for Plaintiff.

Dated, September 26, 1939.

Clarence W. Bronson, Attorney for Defendant; R. S. Allyn, of Counsel for Defendant; Thomas J. Byrne, of Counsel for Plaintiff."

[fol. 29] Mr. Byrne: I offer in evidence a copy of the transcript of record in the case brought by this plaintiff against Sinko Tool & Manufacturing Company. The record is for the Court of Appeals for the Seventh Circuit. I ask that it be marked Plaintiff's Exhibit 7. The purpose of offering this record, and the sole purpose, is merely to show what was before the Court in the Sinko case, and not for any evidential effect.

Mr. Allyn: I do not see that it is particularly pertinent, certainly not in whole. I would hate to have to see that go up on appeal in the printed form.

Mr. Byrne: I offer it as a physical exhibit.

Mr. Huxley: I think my brother made the statement that the evidence in this case would be substantially different from what it was in the case before Judge Holly. We think it is not. Of course, Judge Holly's decision is in no way binding upon your Honor. It has, however, a persuasive value and it is important to know whether or not the evidence in this case is substantially different from the evidence in that case, so that this record is to show what was before the Court, and is offered for no other purpose whatever.

Mr. Byrne: The rule of our Circuit is that records of this nature are constantly admitted for the purpose which I have stated.

The Court: I am not familiar with the rule. In principle, it appears to me to be incompetent. I will have to ask you to refer me to the rule. Your associate has said Judge Holly's decision is not binding on the Court. It is perfectly obvious.

Mr. Byrne: I quite agree to that.

The Court: Why, then have you a right to burden the Court with evidence of something that is not binding upon the Court?

[fol. 30] Mr. Byrne: It is put here not for an evidential purpose, but for the purpose of showing what was before the Court in the other case.

The Court: The only purpose of evidence is evidence. It is not admissible as an exhibit unless it is evidence of some material issue.

Mr. Byrne: Well, if your Honor please, then, I will ask that it be marked for identification because I will get the authorities on that, I am reasonably sure. I have had the experience in this very court of having such a record introduced for the purpose which I stated.

The Court: Very well. Mark it for identification. I have no authority to the contrary. I am just speaking on general principle.

(Plaintiff's Exhibit 7 for identification: Transcript of record in the case of Automatic Devices Corporation vs. Sinko Tool & Manufacturing Company.)

Mr. Byrne: I offer in evidence one of the Sinko cigar lighters which was involved in the Sinko case to which I have referred, which was before Judge Holly, and ask that that be marked as Plaintiff's Exhibit 8.

Mr. Allyn: May I ask how that is pertinent, your Honor? Mr. Byrne: For the same reasons I advanced with respect to the record, if your Honor please, to show the device that was before the Court there.

The Court: I think it is the same ruling indicated. Mark it for identification. What number are you suggesting? Clerk Stevens: Exhibit 8 for identification.

(Plaintiff's Exhibit 8 for Identification: Sinko Cigar Lighter.)

[fol. 31] ARTHUR A. JOHNSON, called as a witness on behalf of the plaintiff, being first duly sworn by Clerk Stevens, testified as follows:

By Clerk Stevens:

- Q. Your full name, please?
- A. Arthur A. Johnson.
- Q. Where do you reside?
- A. Bridgeport, Connecticut.

Direct examination.

By Mr. Byrne:

- Q. How old are you, Mr. Johnson?
- A. 45 years old.
- Q. And what is your occupation?
- A. I am a patent attorney and professional engineer.
- Q. You are, I believe, President of the plaintiff in this action?
 - A. I am.

Q. Will you please state your experience in connection with inventions and letters patent, and particularly with respect to cigar lighters, and state the period over which

you have had contact with cigar lighters?

A. I was registered in the patent office, to practice as an attorney in 1918. Shortly after that, I spent about a year and a quarter in the United States Patent Office as an assistant examiner. And after leaving the patent office, I have been engaged continuously in the work of filing and prosecuting patent applications, study of patents and commercial devices in relation thereto, and both as to validity and as to infringement.

In 1924 I made contact with the Casco Products-with the Connecticut Automotive Specialties Company-and Mr. Joseph H. Cohen, and began to be active in connection with cigar lighters for automobile purposes. From that time, in about 1924, to the present time, I have given a great deal of time and attention to cigar lighters and cigar [fol. 32] lighter patents, and have watched the growth and development of the cigar lighter industry, particularly as it applies to automobile cigar lighters, and I have made quite a few inventions myself in connection with that work.

In doing this work, I was called upon to go to the Con-

necticut Automotive Specialties Company plant, and then to the plant of its successor, Casco Products Corporation, sometimes twice a week, and I spent quite a little time there watching the manufacture of the cigar lighters and discussing improvements and advancements with Mr. Cohen and his collaborators.

Q. Have you made inventions in other arts?

A. I have made inventions in the typewriter art, where I did a great deal of work, and in the manifolding art.

Q. And have taken out in all about seventy some patents?

A. About 72 patents.

Q. Have you ever testified before in a suit in the Federal

Court with respect to letters patent?

A. I have in cases where I have actually had intimate knowledge of the art, such as in the autographic register art and the cigar lighter art.

Q. Mr. Johnson, have you read and do you understand

the Mead patent in suit, 1,736,544?

A. I do.

Q. Will you please explain the invention of that patent, and in this connection you may refer to enlarged drawings and animated devices if you have them, in order to make

the matter as clear as possible.

A. The Mead patent discloses a wireless cigar lighter. By that is meant a cigar lighter in which the igniting unit which is illustrated in Mead in Fig. 8, carrying a resistance coil, is brought to incandescence in a holder or base shown in Fig. 1, and after it is brought to incandescence it is removed completely, mechanically and election [fol. 33] trically, and applied to the cigar or cigarette in the mouth of the user. The wireless cigar lighter is also characterized by the fact that it has a resistance which is capable, because of its mass, of storing heat, so that the heat will be available by the time the igniting unit is brought to the cigarette.

Q. You refer to the resistance 83 on that drawing, Mr.

Johnson?

A. Yes, that is correct. In the Mead's specific construction the igniting unit is made in the form of a plug 71 and has a knob 61, and at the inner end of the plug there is an igniting resistance coil 83. The holding device comprises a base 31 with a shell 41. This shell in the specific form that Mead illustrated is rotatably mounted on a stud 42, shown in Fig. 5.

By the Court:

Q. The shell you designate as the socket?

A. Yes, the shell or socket 41.

Q. I think "socket" is a plainer terminology from my point of view.

A. Well, a socket sometimes might not even be a shell. In

the usual sense, it means something that holds it.

Q. In this Mead device you say this shell to which you refer is a socket?

A. That is right.

By Mr. Byrne:

Q. That is socket 41?

A. Socket 41. The holding device has a wire 57 connected to the battery. That is, the grounded side of the device and the parts colored brown in this enlarged drawing of Mead, are the grounded parts. The holding device also includes a live or hot contact 52, which is connected by a wire 58 to the other side of the battery, the contact 52 and the socket 41 forming the terminals of the holding device.

[fol. 34] In the igniting unit, the center inner convolution of the resistance wire of the igniting unit, is connected by these blue parts to a pin 75, which projects laterally, or rather, radially through the plug. The other end of the resistance wire is engaged with the shell 71 of the plug which is colored yellow here.

When the igniting unit is inserted in the socket, the yellow shell 71 engages the brown socket 41, and the pin 75, moving through a slot in the brown socket, is brought into position to be engaged subsequently by the contact 52.

To bring the device to circuit-closing position in Mead's embodiment of the invention, the plug is rotated. That rotary movement carries the socket along with it, and in order to return it sometime later, the socket is connected to the outside of a return spring 47, while the inside convolution is anchored.

When the igniting unit is turned to circuit-closing position it moves into engagement with the contact 52. Now, so far as making the circuit is concerned, any piece of metal would have sufficed to close the circuit, but in Mead this contact performs the double function, because of its shape, of engaging and holding the igniting unit in circuit-closing position. When the heating element attains the desired temperature for use, the heat coming from the heating element impinges upon the return spring, and then, if it is made of bimetal, tends to increase its turning force, so that it overcomes the detent action between the part 53 of the contact 52 and the pin 75, with the result that the pin moves away from the detent contact and opens the circuit. Mead also suggests that the contact-detent member 52-53 may be kept in position by a bimetallic controller 54, and he says, in his specification, that you can use either this arrangement 54, where you simply take some of the tension off the spring 52 to allow that rotary movement, or you [fol. 35] can use the spring 47 with the extra layer 47a to motivate the automatic action, or you can use both together.

The Court: I don't understand the function of the bimetallic 54.

A. Your Honor, I have here an animated model of this Mead device, with which I think I can demonstrate that point.

Mr. Byrne: Before he starts, may I offer this drawing that the witness was testifying about, showing one sheet of the drawings of Mead's patent, as Plaintiff's Exhibit 9?

(Plaintiff's Exhibit 9: Drawing showing one of Mead's patents.)

Q. Now, go ahead.

A. In this embodiment of the invention where the member 54 cooperates with the contact 52, the contact 52 would be made light in itself, so as not to have any detent action. There would still be a contact, but there would not be a detent. This member 54 adds to the force of that contact. As this member 54 heats up, it will, and I can demonstrate here, gradually decrease the detent action of the spring and permit the contact finger 75 to pass by.

Mr. Byrne: The animated model testified to by the witness is offered in evidence as Plaintiff's Exhibit 10.

(Plaintiff's Exhibit 10: Animated model of Mead device.)

The Witness: In the Mead device the igniting resistance 83 not only performs its usual function of providing a glowing mass to carry to the end of the cigarette, but it also

[fol. 36] performs the function of controlling its own circuit, because the heat from the resistance coil is the thing which actually causes the circuit to be opened. The working resistance, in other words, in the Mead device is the very thing which causes the circuit to be opened. I say "opened." I mean opened when the device is at the proper temperature for use.

Sheet 2, a modification of the Mead invention, is substantially the same except that to return the socket member he has a coil spring 105 quite independent of the thermal action and away from the heat of the heating element. It depends here on the heat coming up around these parts. It has these slots through which the heat can come up and reach the bimetal either through the metal parts contacting it or by heating the air in that vicinity.

In the Mead device, as illustrated, the base 31 is in the form of a socket, because at this time the wireless cigar lighters were clamped onto the dash-board rather than being passed through a hole in the dash-board. Of course, Mead could have put this mechanism back of the dash-board.

By Mr. Byrne:

Q. This mechanism? . -

A. The mechanism of the cigar lighter back of the dashboard, as one of these devices will show, and you could put the igniting unit through that hole, but the whole mechanism could not be inserted through the hole. The mechanism is rather large.

Mr. Byrne: I offer in evidence the enlarged drawing of Sheet 2 of the Mead patent and ask that it be marked "Plaintiff's Exhibit 11."

(Plaintiff's Exhibit 11: Enlarged drawing of sheet 2 of the Mead patent.)

[fol. 37] Q. Mr. Johnson, I tender to you a device and ask you if you can identify it, and if so, state what it is and when and where you learned about it.

A. I believe this is the device—the base of this device is the cigar lighter which Mr. Cohen and I discussed in 1929 when we came across it in the museum of The Casco Products Corporation. We were looking for another cigar lighter to compare with something that had just come on the market, and we ran across this device. The reason I have any doubt at all is that there are quite a few of these, and this is identified as exhibit 7 in the Chicago case. If that jibes with my Chicago testimony, then I am sure of it. There are five or six devices of this around, and I have no identifying marks on this myself, but it was either this one exactly or one like it.

Mr. Huxley: If counsel has no objection: That is the one. The Witness: So far as the igniting unit is concerned, I am not sure that this is the exact igniting unit, because I believe the igniting unit we had had the heating element in it and this one is out. These things are interchangeable and one gets in the wrong place.

Mr. Allyn: I don't object to Brother Huxley's statement that this is the one that was in the Chicago case, but as to

whether it was the one he had in 1929 I don't know.

The Witness: I would know, your Honor, by the fact that when I took it to Chicago I had it in my pocket until I testified about it. Now it has been shuffled up with the others, so I have to go by this tag.

[fol. 38] By the Court:

Q. When was the Chicago case?

A. Last May, I believe it was, or April.

- Q. It hasn't been in your pocket from 1929 until you went to Chicago?
 - A. No, sir.
 - Q. How could you identify it as the one in Chicago?

A. Because I went back to the museum and got it.

- Q. When you went back to get it wasn't there a lapse of some eight years between the time when you first saw it and the second time?
- A. Yes, sir. In looking for the Mead device at the time of this trial, I recalled having seen it. I went to the museum and I myself picked it out of the drawer.

By Mr. Byrne:

Q. Mr. Johnson, is the device which you have in your hand, which was marked "Exhibit 7" in the Sinko case, like the device which you saw in the museum in 1929?

A. Yes, sir.

Mr. Allyn: May I have that question and answer read? (The last question and answer were read.)

Mr. Byrne: If your Honor please, I want to have one of these devices before the Court, but the particular device about which I interrogated the witness is marked as an exhibit in the Chicago case. I would appreciate it if my friends on the other side would examine this other device—they are familiar with it—and agree with me that I may offer in evidence this one or one like it in place of the one which is an exhibit in the Chicago case.

[fol. 39] The Court: Let me suggest that you put in the substitute, subject to verification. Colonel Allyn can then

look it over at his convenience.

Mr. Allyn: I think that would be better, because I should like to examine it a little more.

Mr. Byrne: I offer the substitute Mead's device and ask that it be marked "Exhibit 12."

(Plaintiff's Exhibit 12: Substitute for Mead's device.)

The Witness: Let me see it.

(Mr. Byrne handed an object to the witness.)

No, it is the other one that would correspond to that.

By Mr. Byrne:

Q. That one?

A. Yes.

Mr. Allyn: May I have it appear on the record that my brother has now substituted a third form?

Mr. Byrne: Let us have the fact recited on the record. The Court: The record will show the whole situation.

Mr. Byrne: Surely. I am not substituting anything here. I don't think that Mr. Allyn means to imply that. There were two or three or four of these devices lying on the table and i picked up one and submitted it to the witness, and he said that that wasn't exactly like the one Exhibit 7 in the Sinko case but that another device which I picked up from the table and tendered to the witness is like Exhibit 7 in the Sinko case. It is this device which I desire to offer in evidence and which has been marked Exhibit 12.

[fol. 40] By Mr. Byrne:

Q. Mr. Johnson, have you ever tested one of these Mead lighters, exemplified by Exhibit 12, to determine whether or not it will function?

A. Yes, sir. Yesterday I tested it, Exhibit 12, with the igniting unit that has a tag on it marked "good." It happens to be in the same place now. I found it worked perfectly satisfactory.

Q. Have you a battery here?

A. Yes, sir.

Q. Could you operate this device!

A. Yes, sir.

Mr. Byrne: It will take but a minute or two, if your Honor please.

The Court: I am willing to take his word for it unless the defendant wants to question it. Of course I don't know.

Mr. Huxley: The question of operativeness has been raised here by our opponents.

The Court: I think you are entitled to it.

Mr. Byrne: It will take but a minute. I will ask the witness to take Exhibit 12 and operate it here.

The Court: Is that exhibit safeguarded so that the plug as well as the socket is marked?

Mr. Byrne: Yes, sir.

The Court: I remember at an earlier case I ran into some difficulties with the plugs running around loose.

Mr. Byrne: Well, the plug on Exhibit 12 has attached thereto a yellow tag upon which the word "good" appears.

The Court: I suggest that you mark the plug with the exhibit also.

Mr. Byrne: Yes. The plug on exhibit 12 was also marked with the same exhibit number.

[fol. 41] By Mr. Huxley:

- Q. The plug has been turned into circuit-closing position?
- A. Yes, I have turned the plug into circuit-closing position and put the terminals onto the battery. The igniting unit heated up, it clicked to "off" position, and I removed it while it was still glowing.

By Mr. Byrne:

Q. Mr. Johnson, in this turmoil which I created about picking up the wrong Mead model, you made the statement that the one I tendered to you was not like the one which has been offered in evidence as exhibit 12, which,

I understand, corresponds to exhibit 7 in the Sinko case. Will you state for the record, please, what the difference is?

A. Yes. In Plaintiff's Exhibit 12 the bimetallic strip is wrapped around the socket instead of being in the socket. They were made both ways. In one case they had the bi-metal strips in a coil down at the bottom of the socket, and in the other it was wrapped around the socket.

Q. Now, Mr. Johnson, will you please look at the Mead early lighter, which I tender you, and state whether or not that corresponds to the description which you gave

with respect to another Meed model?

A. That is correct. This one has the coil down in the socket just about like it is shown here (indicating in Fig. 15 of the Mead patent).

Mr. Byrne: I offer the Mead device in evidence and ask that it be marked "Plaintiff's Exhibit 13."

(Plaintiff's Exhibit 13: Mead device.)

- Q. What difference in distinction is there between exhibits 12 and 13? Is it solely with respect to that spring? [fol. 42] A. The location of the bimetallic spring. There may be other minor details, but it functions just exactly the same.
- Q. Did you ever make a test of this Mead lighter, exhibit 13, which you had in your hand a few moments ago and which I held before you, to see whether or not it is operative?
- A. Yes, I made the test of the holding device of exhibit 13 with the knob of exhibit 12. The knob, which is now in exhibit 13 is burned out. I made that test yesterday, and they both work satisfactorily with that knob.
- Q. When you say that the knob is burned out, what do you mean?
- A. The igniting resistance in exhibit 13 has been burned out.
- Q. Will you please turn to the first Cohen patent in suit, number 2,140,311, and explain the same, please? You may in your explanation refer to enlarged drawings which we have here.
 - A. Yes.
 - Q. And an animated model of the device, if you have it.
- A. I have an animated model of the form of the invention shown in the Cohen patent on sheet 2. In this patent there

is again the igniting unit, which is constituted by the parts 23, 52, yellow part 58, and the heating element 54.

By the Court:

Q. What color is the heating element?

A. Red. Here the socket 24, which is colored brown, may be inserted through a hole in the dash-board of the automobile, as is the practice in connection with standard equipment lighters. All the working parts are contained within the compass of the shell, or socket, except the clamp 27, which is slid on from the back afterward and clamped

in position by the nut 29.

In this device the current from the battery is supplied, [fol. 43] as usual, through the ground, through all the ground parts, including the socket 24 to the cigar lighter. The live side of the battery is connected by a wire 63, which is clamped onto this tube, or stem, 31, which has on it a pair of contact fingers, 32. These contact fingers, in this case, do not directly engage the uniting unit at all, but engage a contact 45 on a safety plate 42. The manual standard equipment lighters which were being manufactured by Casco at that time had this safety plate then, so that if something were dropped in the well the live contact would be protected, because there would be a gap between the end of this contact and the supply contact, is shown in green.

Q. The end of this supply contact? You meant 45, did

you not?

A. 45. No, that is not right. Repeating it: The end of the purple contact 45 would not be in contact with the green, and therefore if you dropped a metallic object in the shell you would not have a short circuit.

Now, the igniting unit has a contact 58, which is yellow and which engages a tongue 70 on the socket, to connect

the yellow parts with the battery.

This annular contact 58 is connected by a stud 57 to the inner part of the resistance—the red resistance wire 54. The outer part is connected to a cup, which contains the resistance and which is colored red—cup 56, which contains the resistance is colored blue.

In the normal position of the igniting unit in the holder, which is shown in Figure 1, the yellow part on the igniter contacts the grounded shell, and the blue contact on the

igniter engages a purple contact plate 43, carried by this safety plate. That purple plate is not live at that time. When you want to use the cigar lighter you push in on the igniting unit, which brings the purple contact 45 into engagement with the bimetallic contact latch fingers 32, and these fingers extend over the shoulder 67, as shown in [fol. 44] Figure 2, and hold the safety plate in closed-circuit position, the igniting unit being connected by the safety plate, as I have above explained.

Mr. Byrne: I offer in evidence the enlargement of Sheet 1 of the first Cohen patent, 2,140,311, and ask that it be marked "Exhibit 14."

(Plaintiff's Exhibit 14: Enlargement of Sheet 1 of first Cohen patent.)

Mr. Allyn: If your Honor pleases, is it necessary that this become part of the record—these bulky exhibits?

Mr. Byrne: They are physical exhibits.

The Court: Physical exhibits have always been part of the record. If you can agree on any more convenient proof for the record, there would be no objection.

By the Court:

Q. Let me interrupt. There is something I don't quite understand. Where is the contact between the yellow member of the igniter unit——

A. The yellow member slides on the inner wall of the

socket, but in the energized position-

Q. I thought-

A. If you will refer to this animated model—I was going to refer to it as soon as I got through with this second sheet.

In the operation of this device this yellow contact slides on the inner wall of the socket and it becomes the grounded side.

Q. The inner wall of what?

A. The socket, to insure good contact in the energized position.

Q. I don't understand what the tongue is in the socket.

A. That is what I was getting to. In the energized [fol. 45] position this tongue 70 engages the yellow flange 58 and insures good contact.

Q. Where does it engage?

A. Right here, the upper part of Figure 9, referring to sheet 2 of the first Cohen patent.

- Q. There really is no difference, so far as the contact goes, when the igniter is in the position shown at Figure 9 from when it first enters the socket, is there?
- A. Not so far as the yellow contact is concerned, except that it is an improved contact, because this is a springy part and has to be pushed away.
- Q. The contact is for the whole length of the inner shell, is it not?
 - A. That is correct, your Honor.
- Q. When you insert the igniter it will make the contact at the outermost part of the inner shell?
 - A. Yes.
 - Q. And the contact will continue?
- A. Yes. Physical engagement is present here, but you can't make this absolutely accurately.
 - Q. I understand that. Go ahead.
- A. In the form of the first Cohen invention, shown in sheet 2, the situation as regards these contact fingers has been reversed. That is instead of the fingers being mounted on the stationary part of the base, the fingers are mounted on the sliding plate. I have an animated model of sheet 2, construction of the first Cohen patent, and from this it will be seen that when the igniting unit is pushed in the safety plate with the contact fingers which carry it reach down and engage the green or current supply terminal, and the fingers grasp over the shoulder on the green current supply terminal, closing the circuit. When the igniting unit reaches the proper temperature, these fingers expand, and spring 48, which is placed under tension during that operation, returns the igniting unit and the safety plate to opencircuit position.

[fol. 46] By the Court:

- Q. I don't understand that spring. What kind of spring is it?
- A. Coil spring—expansion spring. I haven't got it in the animated model, but the one end of the coil spring contacts the base proper of the holder and the other end of it reaches up and engages the back surface of the safety plate. It is expanded here to the limit, which is controlled by a lug 50, extending into the socket.

Mr. Byrne: I offer in evidence the enlarged drawing of Sheet 2 of the first Cohen patent and ask that it be marked "Plaintiff's Exhibit 15."

(Plaintiff's Exhibit 15: Enlarged drawing of Sheet 2 of the first Cohen patent).

Mr. Byrne: I will also offer in evidence the animated model of the first Cohen patent and ask that it be marked "Exhibit 16."

(Plaintiff's Exhibit 16: Animated model of the first Cohen patent.)

The Witness: I would like to point out that in this construction—

Q. Of the second Cohen patent?

- A. Of the first Cohen patent. In the construction of the first Cohen patent the contacts are co-axially disposed relative to the igniting unit and the heating element, and here they are not mere contacts, and not mere latches, but they are also bi-metallic,—so that with these two simple fingers you get the double function or triple function of making contact first, second, latching the circuit closed, and third, expanding to open the circuit and permit the interruption of the current.
- Q. In the device of this first Cohen patent the plug is moved into the socket and it is then in inoperative position, is it not?
 - A. That is correct.

[fol. 47] Q. That is the normal holding position while you are going along without seeking a light?

A. Yes, that is the idling position.

- Q. Then, in order to heat the igniting unit or coil, you do what?
- A. You push in on the igniting unit, move the igniting unit longitudinally by a push-and-pull movement into the closed circuit position, where it remains until the heating element is heated up, and then is pushed outwardly bylongitudinal movement.

By the Court:

Q. What is the radial spring actuated pin 68?

A. That is a friction device to hold it in idling position or wherever it is put.

By Mr. Byrne:

Q. To prevent it from dropping out?

A. That is right.

Q. In this embodiment we have co-axial relation between the thermostatic features and the other features of that device, is that it?

A. That is correct.

By the Court:

Q. I don't know just what that means. Will you explain

to me just what you mean by "co-axial position"?

A. I mean this: That the whole business is symmetrical and the center of the contact carrying plate, or the contact fingers, is on the same center as the plug and heating element, so that it all can be embraced within this cylindrical holding device. Those were the limits that had to be maintained to make the device practical for standard equipment purposes.

Q. Just one point. With respect to that yellow contact [fol. 48] member in the igniter, is that a disc? Does it make contact around the entire inner perimeter of the

shell?

A. It is a disc, your Honor.

Q. Making contact?

A. Just a flange on the end of a piece that may or may not make contact anywhere. We don't depend on it. That is why we have this tongue 70. You could not make it that accurate to depend solely on hit-and-miss, so they lance the socket at one place to make sure it touches.

By Mr. Byrne:

Q. That effectually takes care of any wear incidental to the device and it insures proper electrical contact?

A. That is correct.

Q. Now, will you turn to the second Cohen patent in suit and explain the device of that patent?

The Court: I don't know whether it is important. I am not sure that I quite visualize the tongue of that contact.

A. Will you give me that lighter, please?

(An object was handed to the witness.)

Q. Is the tongue stamped out of the inner wall?

A. Yes, I can show it to you in the actual device. This is what it is. It is simply a lanced portion forming a tongue.

Mr. Byrne: I offer in evidence the non-automatic lighter just referred to by the witness and ask that it be marked "Plaintiff's Exhibit 17."

(Plaintiff's Exhibit 17: Non-automatic lighter.)

[fol. 49] By Mr. Byrne:

Q. Now, Mr. Johnson, will you turn to the second Cohen patent in suit and explain the device of that patent? You can make reference, as usual, to the enlarged colored drawings which we have here and to any other animated model

which you may have.

A. In the second Cohen patent the safety plate feature which was in the first patent has been dropped or omitted. thereby giving the possibility of permitting the bimetallic control fingers to directly grasp a part of the igniting unit. In this device the igniting unit is constituted by the parts 32, 36, 33, and 45, the latter being the flanged collar, which engages the grounded part of the holding device, as in the first Cohen patent. The end of the flanged collar carries a cup, 42, within which is the igniting resistance 41, the inner convolution of the igniting unit being connected by the vellow stud 44 and the outer convolution being connected to the cup. The holding device is constituted by a shell or socket 13, which is adapted to be inserted through a hole in the instrument board 11, after which a clamp is fastened in place by nuts 18 and 20. The socket is grounded and receives its current through the chassis of the car that way. The live terminal of the battery is connected by a wire 29 to a stud 26, which secures the contact fingers 22 in place on the end wall of the socket.

In this embodiment of the invention there is the tongue 50 that we referred to a few minutes ago on the socket 13, which engages the annular flange of the member 45 and

which insures good electric engagement.

When the igniting unit is pushed in from the idling position shown in Figure 1 to the operative position shown in Figure 2, the ferrule, or cup, 43, containing the heating element, is pushed between the bimetal fingers 22 and the igniting unit, particularly the circuit-closing part of it, [fol. 50] which is the blue part here, is held in closed-cir-

cuit position by these fingers, which can have the three functions: providing a contact, providing a catch, and being self-releasing when the heat from the heating element heats

them up.

I have an animated model of the construction of the second Cohen patent, which shows how the heating element is moved into engagement with the springs, and when the springs expand, due to heat, it releases the igniting unit, which is returned, in this case by a spring 37, between a movable part of the igniting unit and the stationary part of the igniting unit. That is, when this igniting unit of the second Cohen patent is in its operative position, the shell—

Q. 131

A. No. 38, remains stationary and the rest of the igniting unit moves, compressing this spring 37 and charging it, so that when the bimetallic fingers release the contact on the igniting unit, the main portion of some portion of it—all except the sleeve is returned to its normal position.

Q. And it breaks the circuit thereby?
A. To thereby break the circuit, ves.

By the Court:

Q. What holds the stationary part of the igniter when

it is in idling position?

A. Just frictional contact between the sleeve 38 and the socket 13. This disclosure does not show it, but in practice there are lanced fingers on the sleeve 38 that would provide sufficient friction. Is that the point, your Honor?

Q. Yes. What is sleeve 38? The socket?

A. No. Sleeve 38 is the shell which surrounds the body portion of the igniting unit that is movable relative to the rest of it. I have a device which substantially has it. This [fol. 51] is the device of The Casco Products Corporation. It is their commercial automatic cigar lighter. I have my fingers on the shell, which is equivalent to the part 38 in the patent. In the idling position there is a flange 39 on the end of the sleeve 38, which strikes against the escutcheon 15 of the holder.

Q. That is what I was wondering about. It is that flange that takes up the compression of the spring?

A. That is correct, yes.

Q. I was wondering if you were relying just on friction.

A. It is the flange. I am sorry. I misunderstood you.

Mr. Byrne: I offer in evidence an animated model of the second Cohen patent and ask that it be marked "Exhibit 18."

(Plaintiff's Exhibit 18: Animated model of second Cohen patent.)

Mr. Byrne: I will also offer in evidence the cigar lighter referred to by the witness—the Casco automatic cigar lighter—and ask that it be marked "Plaintiff's Exhibit 19."

(Plaintiff's Exhibit 19: Casco automatic cigar lighter.)

Mr. Byrne: I will also offer in evidence the enlarged drawing of this second Cohen and ask that it be marked "Exhibit 20."

(Plaintiff's Exhibit 20: Enlarged drawing of second Cohen patent.)

The Witness: When the igniting unit in the second patis moved into its operative or working position, it passes by the inwardly projecting portion at the ends of the contact fingers 22. As a result of that the tendency of the spring 37 to move the igniting unit outwardly of the [fol. 52] holder keeps electrical engagement between the contact 22 and the flange 43. In other words, first they go in with a wiping action. By "they" I mean the flange 43 passes the parts 48-49 of the contact fingers 22 with a wiping action, and then the tendency of the spring 37 to move the body of the igniting unit or of the flange 43 outwardly keeps that in good electrical engagement. That was the feature of this second Cohen patent.

By Mr. Byrne:

Q. Mr. Johnson, is this Exhibit 19 which you had in your hand a few moments ago the device which is made, an exemplification of the device made by the Casco Products Corporation, its automatic lighter?

A. In essence it is. There are many refinements and minor structural changes, but in principle of operation it

is practically the same.

Q. I spoke particularly with respect to the lighter which

you had in your hand, Exhibit 19.

A. I am sorry. Did you refer to that? I misunderstood you. May I have the question?

- Q. Please state whether or not Exhibit 19, the Automatic Casco lighter that you have in your hand, is the commercial device of the manufacture of the Casco Products Corporation?
 - A. It is. It is.
- Q. Now, will you please turn to the drawing of the second Cohen patent in suit and state whether or not that shows in general the commercial lighter of Casco Products Corporation?
 - A. It does, in essence.

Mr. Allyn: If your Honor please, is that a matter of proof or of opinion? He has already stated there are

many differences.

[fol. 53] The Court: Refinements, he said, I think. It is admissible. It is perhaps a matter of opinion, but it is an opinion of an expert. He is subject to cross examination, so that if you wish to bring out any distinctions, that is possible.

By Mr. Byrne:

Q. Did you complete your answer to that question, Mr. Johnson?

The Court: He said, "essentially, yes."

The Witness: Essentially yes, except for minor changes in refinements.

By Mr. Byrne:

- Q. Yes. Are you familiar with the device of the defendant involved in this case?
 - A. I am.
- Q. Have you a drawing of it and an animated model of it?
 - A. Yes, sir.
- Q. Will you please explain the device of the defendant here involved, and in that connection you may utilize colored drawings. By the way, Mr. Johnson, before you start on my first question, is this device which I tender to you which is Plaintiff's Exhibit 2, the device of the defendant which is here involved?

A. Yes, sir.

Mr. Byrne: If you care to see that, your Honor.

(Mr. Byrne handed exhibit to the Court.)

By Mr. Byrne:

Q. Now, will you proceed with your explanation of this

device, Mr. Johnson?

A. I have an animated drawing of this device which is [fol. 54] rather difficult to examine because many of the parts are contained within the interior of the igniting unit. I think it will be very helpful in understanding the construction.

This cigar lighter is a wireless cigar lighter. It has a removable igniting unit shown at the right, exhibit—

The Court: Let us get this marked so the record will show from what he is talking.

Mr. Byrne: I offer in evidence the enlarged drawing of Exhibit 1-A and ask that it be marked.

Clerk Stevens: Exhibit 21, 20 was the chart before.

Mr. Huxley: 20 or 21 is that?

Clerk Stevens: 21.

(Plaintiff's Exhibit 21: Enlarged drawing of Exhibit 1-A.)

By Mr. Byrne:

Q. Will you proceed, Mr. Johnson?

A. This is a wireless cigar lighter and has a removable igniting unit shown at the right-hand side of Exhibit 21, and a holding device shown at the left-hand side of Exhibit 21. The igniting unit has a heating resistance coil 27 mounted within a cup 28, and mounted on a post 25, to which the inner convolution of the resistance coil is connected. The post 25 is carried by a spider-like plate 24, which has a cylindrical portion or sleeve 23. This sleeve carries an insulating sleeve 18. Sliding within the sleeves 18 and 23 is another sleeve 19, which extends from the inner end of the sleeve 23 back into the cavity within the sleeve, and at its outer end is fastened to a stud 21 which is covered with insulation 21-a, and on which the knob 22 is mounted.

There is relative movement between the inner sleeve 19, [fol. 55] stud 21 and handle 22, and the outer sleeves 23 and 18, spider plate 24, post 25, and the cup 28 carrying the resistance 27. The animated model will show that relative movement.

I am taking the igniting unit out of the holding device, and by pushing on the igniting unit at one end and on the heating element at the other end, you can see the relative

movement between the parts.

The spider 24 is made that way, that is, with arms, and extends through holes in the sleeve 19, because they want to fasten the inside parts to the outside parts, and they have to have spider legs like that going through these holes in the sleeve.

The important thing is that part of the igniting unit stays stationary and part of it moves, and between these two parts we have the spring which is put under tension or charged, the spring being marked 34 in Exhibit 1-A and Exhibit 21.

Mr. Byrne: I offer in evidence the animated model of the defendant's device just referred to by the witness, and ask that it be marked.

Clerk Stevens: Exhibit 22.

Mr. Byrne: Plaintiff's Exhibit 22.

(Plaintiff's Exhibit 22: Animated model of the defendant's device.)

The Witness: The holding device in Exhibit 21 comprises a socket 10 which is a cylindrical socket and which may be inserted through a hole in a dashboard and which has a clamping member around the outside which is applied from

the back of the socket to hold it in place.

Within the socket there are three stationary fingers 17, forming abutments for a purpose which I will explain in a [fol. 56] moment. They may be considered as the ground contacts of the holding device. The live contacts are constituted by the bimetallic spring finger contacts and latches 16, which are fastened in place by a stud 12 connected by a wire 13 to the source of current.

When the igniting unit is in its idling position shown on

this chart of Exhibit 1-B.

Mr. Byrne (Interrupting): I offer the chart referred to by the witness and ask that it be marked Plaintiff's Exhibit 23.

(Plaintiff's Exhibit 23: Chart of defendant's device.)

A. (Continuing:) The cup 28 containing the resistance wire 27 is in approximate engagement with the contact fingers 17. That is, they may have physical engagement there. They just touch. And at the same time a flange 35

on the sleeve 19 on the igniting unit is spaced from the contact fingers 15 on the holder, so that the circuit is open between those two contacts.

When the igniting unit is pushed into closed circuit position—can you see that, your Honor?

The Court: Yes.

A. (Continuing:) When the igniting unit is pushed to closed circuit—when you want to use the cigar lighter, you push in on the knob 22 thereby moving the sleeve 19 with its flange 35 inwardly, bringing the flange 35 into engagement with the ends of contact springs 16, which are shaped so as to latch over the flange and hold it in that position against the tension of the spring 34, which has then been increased by the compression of the spring.

During this operation the sleeve 23 and the sleeve 18 remain stationary because these two parts are connected [fol. 57] through the post 25 to the heating element cup—and when pressure is brought on these parts 25 and 28 by the tensioning of the spring, the cup 28 is forced positively, or rather forced forcefully, against the contacts 17 in the base. The cup cannot go any further, and therefore the sleeve 19 with its flange 35 is brought under the contact fingers 16.

The parts remain in this position until heat from the resistance, igniting resistance 27, impinges upon the bimetallic contact latch fingers, performing the three functions again of contacts, latches and thermostatic action. The detaining action of these fingers 16 decreases, permitting the spring 34 to overcome the detaining action and move the movable parts of the igniter to open circuit position.

By the Court:

Q. I do not understand why, in that drawing, the end of the bimetallic contact finger appears to penetrate the sleeve.

A. Penetrate?

Mr. Byrne: Go through here.

Mr. Huxley: Slot.

A. (Continuing:) It may or may not, your Honor. That may be a draftsman's error. I would like to see the device, if I may, and I could tell you if that was correct,

(The witness referred to exhibit.)

When that drawing was made, it was made on small-scale and when you enlarge it, a little thing like that may be of importance. It seems to penetrate it on the device.

[fol. 58] By the Court:

Q. I thought it was a solid cylindrical shell. Is it perforated?

A. It is perforated, yes, sir. There are little windows there to keep it from touching. If it expanded out and touched the side wall, of course you would shortcircuit across there.

Q. Yes.

A. I think the drawing is accurate. It looks like in the actual device it sticks out through the window just a little bit.

Mr. Byrne: I offer in evidence the enlarged drawing of Exhibit 1-C, and ask that it be marked Plaintiff's Exhibit 24.

(Plaintiff's Exhibit 24: Enlarged drawing of Exhibit 1-C.)

Mr. Byrne: We will have to get them officially marked a little later.

By the Court:

Q. What holds the heating cup in contact with the lugs or abutments of the socket?

A. In the heating-up period?

Q. Yes.

A. The reaction of the spring 34. Because by holding the flange 35 on the inner sleeve 19 against pulling out, the action of the spring reverts through here, through the post 25, and cup 28, and presses the cup 28 into engagement with the abutments 19.

Q. Does that leave the spring with any function whereby it holds a sure contact between the bimetallic fingers and the—

A. Yes.

Q. (Continuing:) - Heating element cup?

A. Yes, your Honor.

Q. Can the spring have the double function?

A. This spring. Yes, sir. Because flange 35 is trying to [fol. 59] escape from under that bent-down end of the bime-

tallic spring. The flange 35 is trying to go to the right under the influence of this spring, forcing the heating element to the left. The animated model, I believe, shows that.

Q. I see it.

A. Besides what I have described, the defendant's device has on the sleeve 18, which is this insulating sleeve, an annular groove, and that annular groove is engaged by a spring detent on the well to hold the igniting unit in the socket against causal movement, against accidentally falling out in the idle position.

By Mr. Byrne:

Q. Does that appear in the animated model, Mr. Johnson?

A. Yes. That detent is represented by a long piece of brass engaging a notch in the part representing the sleeve 18.

By the Court:

Q. Point it out to me on the model, will you?

A. The annular groove is this groove here in the light bakelite piece, and that is engaged by this tongue on the shell or socket. When you push that in it simply holds it in against rattling out. There has to be something. It is represented here, your Honor, in this animated model.

In this animated model, this notch represents the annular groove, and this piece of grass represents the tongue in the

well or the socket.

By Mr. Byrne:

Q. The device of the defendant shown on Exhibits 21 23 and 24, these enlarged drawings, is intended to go through the dash of an automobile, is it not, Mr. Johnson?

A. Yes, sir.

[fol. 60] Q. And to be in close compass. That is to say, it is one of those modern devices that has to be made small.

A. All of the parts are made so that they will fit within the standard hole in the dashboard.

Q. And they are made in alignment? The parts are made in alignment?

A. The parts are in co-axial alignment. The bimetallic combined contact and catch is in axial alignment with the

heating element and plug, and it is located in close prox-

imity to it.

Q. Yes. So that in the operation of this device you merely push the unit inwardly to effect the closing of the circuit by gripping of the parts which you mentioned a moment ago?

Mr. Allyn: I object to the form of that question.

The Court: Overruled.

The Witness: May I have the question?

(The last question was read.)

A. That is correct.

By the Court:

Q. In idling position, as I understand it, there is not even a one-point contact.

A. Well, your Honor, that is a debatable subject.

Q. Well, I do not want to get into any debates.

A. The yellow cup 28.

By Mr. Byrne:

Q. Exhibit 23.

A. As in Exhibit 23, may or may not—I have tried it. I have put a battery and a buzzer across, and sometimes they touch well enough to pass a current and sometimes they do not. The essential thing is, though, that when it is pushed in they do.

[fol. 61] Q. That is to say, when they are pushed in for

the purpose of closing the circuit?

A. No. What I mean is when you push in on the igniting unit and bring the flange 35 under the bimetallic contact spring 16, then you have good electrical engagement between the cup 28 and the lugs or abutments 17, through the reaction of the spring 34.

Q. Mr. Johnson, have you an enlarged colored drawing of the device of the Casco Products Corporation?

A. Yes, I have here an enlarged drawing of the commer

cial Casco Automatic Wireless Cigar Lighter.

Q. Such as is exemplified by the Exhibit 19, which you say a few moments ago?

A. Yes, sir.

Mr. Byrne: I offer in evidence the enlarged drawing last referred to by the witness and ask that it be marked Plaintiff's Exhibit 25.

(Plaintiff's Exhibit 25: Enlarged drawing of commercial Casco Automatic Wireless Cigar Lighter.)

By Mr. Byrne:

Q. Will you please explain briefly the operation of the device of Exhibit 25 and Exhibit 19?

A. This is the same as the second Cohen patent, except that, for instance, one difference being the specific shape of the bimetallic combined contact and latch, the little different way in which the latch and current-supplying stud is insulated from the base, different kind of clamp for holding it onto the instrument board, and different kind of sleeve corresponding to the sleeve 38 of the second Cohen patent.

The circuit is closed in the same way by pushing in on the handle of the igniting unit to bring the ferrule or flange around the resistance wire in engagement with the bimetallic fingers. The tendency of the spring to push the parts back [fol. 62] maintains the good electrical engagement between the contact fingers and the flange. The outer sleeve, semistationary sleeve you might call it—has a flange which engages the escutcheon of the socket. I would say it was, except for minor details which are troublesome from an engineering point of view, to arrive at, it is substantially the same as the second Cohen patent.

By the Court:

Q. The second or first Cohen?

A. The second Cohen patent.

By Mr. Byrne:

Q. Mr. Johnson, during the course of your testimony you have used the term, "wireless lighter." Will you please state what a wireless lighter is?

A. A wireless lighter: the word "wireless" is a convenient term to use as defining a type of cigar lighter in which there is a heating element which is brought to incandescence in a holder and then bodily removed completely, electrically and mechanically, to apply to the end of the cigarette, the heating resistance having sufficient mass to hold the heat

during the time you take it from the socket and apply it to the cigarette.

Q. I have heard the expression, "cordless lighter," used in connection with this case. Would you say that "cordless lighter" means the same as "wireless lighter"?

A. They are synonyms.

Mr. Byrne: You may cross examine, Mr. Allyn.

[fol. 63] Cross-examination.

By Mr. Allyn:

Q. Mr. Johnson, you stated that this Exhibit 25 shows, in your opinion, what is substantially the same as the socalled No. 2 Cohen patent?

A. Yes, sir, in essence.

Q. I didn't get the last part.

A. In essence.

Q. In this Exhibit 25, form of lighter, what holds the outer sleeve which had the number 38 corresponding to it in the patent, I believe? What holds that sleeve in the socket?

A. In the form shown in that drawing, a series of lanced tongues around the periphery of the sleeve.

Q. Is that the way they are made now by the Casco Company?

A. Yes, sir.

Q. Are you sure of that?

A. If I understand your description, I am sure of it.

Q. Do you recognize what I am showing you now!

A. Yes, sir.

Q. Is that the same as shown on this drawing?

A. It is intended to be. The drawing is intended to be a showing of this. This drawing differs in that particular from the exhibit—

Mr. Byrne: 19.

A. (Continuing.)—Casco device. Here. Exhibit 19, in which there are only three of these tongues. And in the device you just handed me, oh, I should judge there might be 25 of the tongues or twenty of the tongues.

By Mr. Allyn:

Q. What is the object of having the increased number!

A. Oh, smoothness of operation, greater tolerances in the manufacture of the shells. The shells can be off. In [fol. 64] relation to one another, they can be off a little more

than they could with that construction.

Q. Won't you please show the Court how the plug is inserted in Exhibit 19, the normal way? I will hold on to the socket. I will be the dashboard.

... We have one there.

Q. Never mind. I would like to have this. This is your exhibit. And show the Court what happens when you push it in. Now, you have pushed the plug in and the igniter has locked with the latches, hasn't it?

A. Mr. Allyn, the difficulty was I pushed once and I cannot feel. I would like to have it on a solid thing. You

vielded.

Q. All right. Try the other one.

A. At the first push you yielded, and the second I could not tell how far it was.

By the Court:

Q. Why don't you do it right on the bench?

A. This is mounted on a solid substance representing a dashboard. You take the igniting unit in your finger that way, and you can reach over as I do, reach over like that and put it right in. You can do it without reaching over and put it in, and it didn't go into closed-circuit position.

By Mr. Allyn:

Q. That one didn't happen to.

A. That one didn't happen to, and it might happen or it might not. If it does stay in, it will simply come out when it gets hot and that is all there is to it.

Q. Why is it necessary to have such a strong spring in

that sleeve?

A. I do not understand your question. Such a strong spring?

[fol. 65] Q. Why is it necessary to have this split type of outer sleeve made so strong?

A. Well, simply so that it won't fall out inadvertently.

Q. So that it won't jump out?

A. I wouldn't say "jump" out; wouldn't fall out inadvertently, because if it fell out there wouldn't be any problem about jumping out.

Q. Don't they jump out at times?

A. I have never had one jump out, when I have operated,

and I have been using it since 1936 on my car.

Q. Why did they make the change in construction from the one like Exhibit 19 having three tongues, and the other one, which you say they are now making, that has perhaps 20 or more?

A. My only---

Mr. Huxley: I object to that question on the ground of immateriality. It is quite obvious it is a mere mechanical variation. It is not getting us anywhere.

The Court: I do not see the purpose of it.

Mr. Allyn: I could amplify it, but I would prefer to have the witness answer.

The Court: I thought he had pretty well covered it. Increased tolerance, smoothness of operation. Is there anything else?

The Witness: That is all I know of.

By Mr. Allyn:

Q. Isn't it highly important to prevent that plug from jumping out?

A. I should say it would be. Yes, I would consider it highly important to prevent the plug from jumping out.

Q. Absolutely necessary to prevent it from jumping out, [fol. 66] commercially?

A. You mean in its normal operation? Yes, I would say so.

- Q. Is there anything in this patent that you say you understand, No. 2 Cohen patent, that says anything about that?
 - A. About jumping out?

Q. Yes.

A. I don't know. I doubt whether there is anything in about that. The one thing that I think should be made clear in that connection is that sometimes these are used in a vertical position, and gravity itself would keep it in.

Q. Was there anything said about it in the patent?

A. I don't recall it, Mr. Allyn.

Q. You prosecuted the patent? A. I did, yes, I don't recall it.

Q. And you have studied the patent just before coming on the stand?

A. Well, I didn't study it line for line. I will be glad to look at it and see, if there is any question you want me to answer.

Q. No, if your recollection is-

A. (Interrupting.) My recollection is that there is nothing. My recollection—well——

Q. You have no recollection?

A. I have a recollection of the same point having been lought up before, and I investigated it.

Q. And you couldn't find anything in the patent?

A. I don't recall finding anything in the patent about that.

Q. Now, in the patent, what takes up the thrust of the spring 37?

The Court: What patent?

By Mr. Allyn:

Q. In the second Cohen patent.

A. Second patent.

Q. What takes up the thrust of the spring 37? [fol. 67] A. The thrust of the spring 37 is taken against the inwardly extending flange on the sleeve 38, and that is transmitted to the flange 39 engaging the escutcheon.

By Mr. Allyn:

Q. Where is the other end of the spring pressed?

A. Against the knob.

Q. Against the knob?

A. Yes.

Q. Is that the case in this Exhibit 25?

A. No. It does not engage directly against the knob of Exhibit 25, no. There is a flange on the igniting unit, flange a on the igniting unit, which is screwed into place, which is held in place, by a sleeve B; so that the whole assembly can be complete, less the knob, because one manufacturer wants a knob of one kind and another manufacturer wants a knob of another kind.

Q. It is absolutely necessary to make the knob detachable so that it can be conformed to the design of a car manufacturer?

A. It was not necessary in the beginning.

Q. I am talking about present commercial practice.

A. Today? Yes.

- Q. Do you find anything about that in the patent?
- A. No. In the second Cohen patent?
- Q. In the second Cohen patent.
- A. No.
- Q. In the second Cohen patent there is a large member having two arms marked 22; is that correct?
 - A. That is right.
- Q. And when you thrust the plug in, the rim 43 of the igniter engages into the recesses 49 of those fingers; is that correct?
 - A. That is correct.
- Q. And the thrust is taken up then by the part marked 47 on this Exhibit No. 20; is that right?
- A. That is right. The manual thrust, you mean? [fol. 68] Q. The manual thrust, right.
 - A. A manually-applied thrust. That is correct.
- Q. Now, the shape of that device in the Exhibit 25 is very different from the shape in the patent, No. 2 Cohen, is it not?
 - A. It is different.
- Q. And between the fingers in Exhibit 25 and in the Plaintiff's Exhibit 19, there are three abutments, are there not?
 - A. Yes, sir.
- Q. Is there anything of that sort in the Cohen No. 2 patent?
- A. Yes, the equivalent of that is here. In the second Cohen patent the arms of the fingers 22 come out and make a sharp bend, and then they go around at the part marked 49, around and inwardly, and then they go out at the part marked 48. These three fingers that are in the Exhibit 19 are intended for use to reclose the circuit, if you want to get a second light before the bimetallic fingers have a chance to cool off sufficiently; to go in there and push it in, and that closes the circuit. These radial parts, you might call them, of the fingers 22 perform that same function.
- Q. In other words, if you hold the plug in you can retain the current on as long as you like?
 - A. That is correct.
- Q. And what will happen if you retain the thing pressed in by hand?
- A. Well, you will probably burn your finger, the first thing that happens.

Q. And then?

A. Then, if you are insensible to the heat, why, you may burn up the car.

Q. In the second Cohen patent, normally the rim of the member 45 doesn't engage the socket 13; is that not correct?

- A. I believe that is the way it is described in the Cohen patent, yes. I believe that is right. It wouldn't maîter whether it did or it did not.
- Q. Well, as a matter of fact, both sides of the circuit [fol. 69] in the plug of the Cohen No. 2 patent, both sides of the circuit are open?

A. As described, that would be correct.

Q. As shown?

A. Yes.

Q. And described?

A. Yes.

Q. And you close the circuit by thrusting the plug inwardly so that the rim of 45 engages the tongue 50 at the same time that the rim 43 of the igniter cup snaps into the recesses 49; is that right?

A. I don't know if it is exactly the same time. It could be.

Q. When the circuit opens there is a double break, is there?

A. Yes. As described, it is a double break.

Q. And that is true, is it not, in the commercial Casco lighter, Exhibit 19?

A. I don't know about that.

(Witness refers to exhibit.)

I would say that was one of those debatable things, like I spoke about the contacts in the defendant's device. Whether it touched there or not does not make a particle of difference. It might and it might not. It depends on how this tongue was pushed down, in the first place, and whether this bakelite piece was a little over-size or a little under-size. It is quite immaterial whether that happens together or not, or whether that touches before or does not touch before.

Q. With this Exhibit 19, isn't it a fact that when the plug is in the open-circuit position the spring fingers corresponding to 50 are not in contact with any part of the plug?

A I wouldn't want to say yes or no on that, Mr. Allyn, because it may be touching on that. It may not. I don't

know. I never tried to find out, because it does not make any difference whether it touches or does not. I could

not tell you whether it does or not.

Q. When the plug of this No. 2 Cohen is put in closed-[fol. 70] circuit position and then released, the release action is due to the heat of radiation, convection and conduction from the igniter coil, and its rim, in direct contact with the latches of the thermostatic element; is that correct?

A. That is correct.

Q. And is that true in the commercial Exhibit 19, device of Casco?

A. Yes, sir.

The Court: Shall we take our noon recess? Recess till 2 o'clock.

Mr. Huxley: On that point about the introduction of the record of the Sinko case, possibly it might be of assistance to look at this case, the Mast Foos case.

The Court: I will be glad to take it with me.

Mr. Huxley: And I would like to speak just a moment about it when we convene.

(At 1 P. M. a recess was taken until 2 P. M.)

ARTHUR A. JOHNSON, a wi'ness called on behalf of the plaintiff, resumed the stand and testified further as follows:

Cross-examination continued.

By Mr. Allyn:

Q. I think you said that in your opinion the Casco lighter, Exhibit 19, was a substantial embodiment of the construction of the Cehen patent, Cohen No. 1 patent.

A. No. 2 patent.

Q. I beg your pardon. No. 2 patent. Is that right?

A. In essence, yes.

[fol. 71] Q. What kind of bimetallic metal is employed in that Cohen patent?

A. I don't know who supplied it. Bimetallic metal? It

is just bimetallic metal.

Q. Do you know the difference between high temperature and low temperature bimetal?

A. I suppose there is. I know there is such a difference. But that was not defined there as high or low or anything else. Just bimetal.

Q. Just bimetal, in the patent?

A. In the patent.

Q. There is no disclosure of what type shall be used?

A. No.

Q. I think you said that heat from the coil was transmitted directly from the igniter unit in this Cohen patent to the thermostatic latch?

A. I said it was by radiation, convection and conduction. I answered your question.

Q. By direct contact?

A. The conduction is by direct contact.

Q. Yes.

A. With the shell of the heating element.

Q. You mean the rim of the igniter coil?

A. No. The little ferrule within which the igniter coil is mounted.

Q. Now, do you know of any commercial automatic lighter that does not have a latch to hold the parts in the closed-circuit position?

A. No, I do not.

Q. Would it work without a latch?

A. I know of constructions that will work without latches, yes.

Q. Do you know anything on the market that will work without a latch?

A. I said no. There is nothing on the market without a latch, but I know of some constructions. An invention I made does not have a latch.

Q. You mean the buckling spring?

A. No, it is not exactly buckling spring.

Q. Do you know of any commercial automatic that does not have a spring?

A. No.

Q. Could one exist without a spring?

A. Yes. "Could one," you say?

[fol. 72] Q. Yes.

A. Yes.

Q. What would that be like?

A. Well, it might have some expansible member that increased its length when it was heated up, and that would

actually physically do the moving, rather than permit it to move.

Q. Open the circuit, in other words?

A. That is right.

Q. Do you know of any automatic lighter that does not employ a thermostatic element?

A. May I have that question?

(The last question was read.)

I know of some constructions that do not have a thermostatic element, yes.

Q. Anything on the market?

A. No.

Q. In this Cohen No. 1 patent, Exhibit 15, did you state how heat from the igniter was transmitted to the thermostat?

A. Yes. In this construction the heat from the igniter is transmitted to the thermostat through these metal parts, including the purple contacts 43¹ and stud 77, to the bimetal parts.

Q. It practically all goes through stud 77, isn't that true!

A. Yes, that is true in that construction.

Q. You refer to Exhibit 17 as a non-automatic, I believe (handing an object to the witness).

A. Yes, sir, a non-automatic wireless lighter.

Q. That was the type made by Casco?

A. Yes.

Q. In 1921 or 1922?

A. No.

Q. 1931 or 1932!

A. Yes, 1931 or 1932; anywhere in there.

Q. Prior to the filing of the two Cohen patents in suit!

A. Yes, sir.

Q. Does that plug in Exhibit 17 differ materially from [fol. 73] the plug shown in the first Cohen patent in suit!

A. No, sir

Q. You used the term "Live" or "hot" contact in referring to one of the devices. Does it make any difference which side of the switch is grounded, from a practical standpoint?

A. No, I should say not.

Q. That hot or live contact doesn't have anything to do with the temperature of the contact, does it?

A. Oh, no. I used that term because I read Judge Hincks' decision wherein he mentioned the hot contact, and I thought he would understand it better.

Q. I wanted to make sure that we all understood the same thing. It is a bit misleading. It has been to me to hear the term, but I think it is clear.

A. I call it a live contact.

Q. I want it clearly understood that that had nothing to do with the temperature of the contact, that was all.

Now, in this Mead situation you have referred to some samples that you tested. I think this plaintiff's Exhibit No. 7 in the Sinko case was referred to as similar to another.

Mr. Huxley: Similar to Exhibit 12 in the present case.

By Mr. Allyn:

Q. To No. 12. Am I correct (handing an object to the witness)?

A. Yes, sir.

Q. In neither of these devices is there a spring in the bottom of the socket, is that correct?

A. That is correct.

Q. And it really is a spiral spring within the casing surrounding the socket?

A. That is correct.

Q. Is there anything in the patent to Mead which shows a spiral around the base of the socket?

A. No, it is shown inside the tube or socket in the Mead [fol. 74] patent. In the sheet 2 construction there is a spring outside the socket, but that is not a bimetallic spring.

Q. You never saw a device like that sheet 2 of Mead's, did you?

A. I can't recall having seen anything like that in that regard—in that connection.

Q. Now, in this Mead patent and in this Exhibit No. 12 would you say that the spring was coaxial with the socket and the plug?

A. Yes.

Q. In the model Exhibit No. 22 would you say that the thermostatic exemplification was coaxial with the plug?

A. Well, that is in a flat plane. You can't talk about things being coaxial there. In the device of which that is a representation it is my opinion that it is coaxial.

Q. Would it be coaxial with one spring like that?

A. It would hardly be coaxial with one sprin

Q. In other words, you have to have two springs?

A. Yes. That is lopsided.

Q. No one would think of putting a single spring on one side, would they?

A. I don't know what they would think of.

- Q. I mean commercially?
 A. No, not commercially.
- Q. The natural thing would be for a person to put one on each side in order to have balanced pressure, is that right?

A. You might have three.

- Q. Two or three. Do you know what kind of bimetallic metal is employed in these alleged models of the Mead device?
- A. You mean whether the high temperature or low temperature?

Q. Yes.

A. No, I don't know. All I know is that they work.

Q. What effect did it have to place the spring in the Mead device on the outside as distinguished from the inside of the socket, as shown in Exhibit 13?

[fol. 75] A. Well, I would say that the putting of the spring on the outside made it less critical in operation and avoided a tendency for the spring to anneal. If you use a spring in a situation that is so close to the heat that you find it is going to anneal, why, we would move it a little further away. By annealing I mean annealing to the point where it lost its tension.

Q. In other words, it is liable to be damaged in the bottom, where it would not be so likely to be damaged around the outside?

A. I would say that the likelihood would be greater when it was in the bottom, unless you had a metal—You might have a metal on the outside that would be damaged quicker than a better metal on the inside. It is all a matter of cut and try until you get the right bimetal for the purpose.

Q. Is this a matter of experiment?

A. Cut and try, I would say.

Q. In the forms of the Mead device that you have seen did any of them use bimetal in the member which is known as the latch?

A. You mean as made by Mead?

Q. These so-called Mead devices of Exhibit 12 and 13.

A. No, I tried to examine them. I couldn't tell whether it was bimetal or not. I believe it is not bimetal in the latch. It is not bimetal in the patent.

Q. That latch and the holder for the latch are quite a

distance from the rear, are they not?

A. They are.

Q. As shown in the patent?

A. They are.

Q. And it would require a considerable amount of heat to affect the thermostat in that location?

A. If you used the bimetal in that location as you would use down in the well, yes, but if you had a more sensitive bimetal up there, why, it would operate the same. It is just a matter of how sensitive the bimetal is.

Q. Do you find anything in reference to that in the Mead

patent?

A. In reference to what?

[fol. 76] Q. The character of the bimetal.

A. No. No.

Q. You refer to the defendant's structure and seem to have some question in your mind as to whether or not the rim of the igniter unit normally engaged the stationary abutments in the socket. Is that correct?

A. Yes, I stated that.

Q. When you insert the plug of the Cuno lighter into its socket, the natural thing to do is push it in until the igniter strikes the abutments, isn't that correct?

A. I would say that may be correct, but you have that detent action there and that would locate the position of the igniter whether you pushed it in all the way or not.

Q. That is, the spring detent such as is shown on Ex-

hibit 221

A. By a long piece of brass.

Q. Yes, Mr. Johnson has substituted a long brass latch for the particular form shown in the sample.

A. For the tongue.

Q. For the tongue in the Cuno socket. That detent engages in the groove in the insulating sleeve?

A. That is correct.

Q. And the purpose of that is to hold the sleeve in the socket isn't it?

A. Removably hold it in the socket, that is right.

Q. To prevent it from jumping out when the circuit is open?

A. No, I don't see anything that would make it jump out when the circuit opens, but it holds it in against whatever might tend to move it out.

Q. You mean that you don't see that there is anything here that would tend to make the plug jump out of the

socket when the circuit opens?

A. Yes, there might be a tendency, because this flange 35, I believe it is, would strike the sleeve 23. Yes, there would be a tendency.

Q. Then that detent spring engaging in the groove in the insulating sleeve would prevent it from jumping out?

A. Yes, if it had a tendency and if it really did, it would [fol. 77] prevent it. For instance, what I have tried to get at is this: If you hold this thing vertical—Sometimes these are mounted at the back seat of the car, and then it would be in a vertical position rather than a horizontal position, and then it would not jump out under any circumstances I can imagine.

Q. They would have to be made so that they could be put

in any position?

A. Yes, I should say that that was right, but a device would be perfectly satisfactory without that detent if you were only going to mount it vertically.

Q. That would depend upon how heavy the parts were

with respect to the spring, wouldn't it?

A. I can't imagine it jumping out regardless.

Q. You cannot? Do you recognize what I am showing you now?

A. Yes, that is a Casco lighter like Exhibit 19.

Q. You think there is no particular danger of that jumping out?

A. When it is in a vertical position—when it is upright.

I did not say it wouldn't jump out.

Q. That would depend upon the adjustment between the springs in the latch fingers and in the ejecting spring, would it not?

A. I would say that that was right.

Q. This is one of the plaintiff's lighters isn't it (handing an object to the witness)?

A. It was.

Q. Well, isn't it?

A. I don't know what has happened to it or whether anything has happened to it.

Q. Examine it. See if anything has happened to it.

A. I can't tell whether anything has happened to it. It looks like the ends of these little tongues that are supposed to frictionally hold the igniter in the socket have been burnished off a little.

Q. Do you see any sign of a burnishing tool on that?

A. I certainly do. I see signs of a great deal of wear or a burnishing tool of some kind.

Q. Then, the wear of the socket does have an effect on

[fol. 78] the spring fingers?

A. The wear would have the same effect as burnishing it; certainly. I never saw one of Casco's lighters operate like that.

Q. You never saw one as bad as that?

A. No, I never saw one as bad as that.

Mr. Allyn: I should like to offer it in evidence or for identification.

The Court: Mark it for identification.

Mr. Byrne: We object to that.

The Court: He is just having it marked for identification.

(Defendant's Exhibit A for Identification: Casco lighter like Exhibit 19.)

By Mr. Allyn:

Q. If these spring fingers were down, as you think they have in this sample, that would be a natural result, wouldn't it?

A. Yes, sir.

Q. When you referred to element 24 on Plaintiff's Exhibit 21 I didn't undertand whether you said 24 was a spider or a fiber.

A. A spider.

Q. A spider?

A. A spider. It may be a bad name for it, but it has three legs. It is spider-like in form. It has three legs that go in from the inside to the outside.

Mr. Allyn: I couldn't understand the word that was used.

Mr. Byrne: We adopted it from your office, Mr. Allyn.

Mr. Allyn: Thank you for the help.

Mr. Byrne: Mr. Johns told me; he referred to that in my presence.

Mr. Allyn: We don't deny it is a spider.

[fol. 79] By Mr. Allyn:

Q. Go back for a moment to that Exhibit 20 showing the construction of the second Cohen patent. I understand that the idea is when the device has been heated the latch fingers 47 will be in the position of Figure 3; is that correct; after heating?

A. Oh, I do not know. I would not say that. You could not show the position before and after heating. You have to go by the description there. They look as though they had expanded out a little bit with relation to Fig. 2, but no attempt was made to show the position after heating, to the exact position, I mean.

Q. After it had been heated the arm would bend out?

A. That is right.

Q. In order to release?

A. That is right.

Q. And if you re-heated it by holding the plug in?

A. Yes.

Q. It would bend out still further, wouldn't it?

A. Yes.

Q. Continue to bend, would it not?

A. Yes.

Q. Then in that event the main arms 47 would become inclined, would they not?

A. As a matter of fact, I think that some of the bending would take place—most of the bending would take place right in here, anywhere. A tendency would be for this part to which the reference number 47 is applied, to swing out from its junction here.

Q. So that the two opposite arms would spread out from each other?

A. Yes, somewhat.

Q. Then if you continued to push on the plug, the igniter head would tend to spread them mechanically. Would they not?

A. I doubt whether things would last that long. I think that you would probably burn your finger or the resistance

wire would burn out by that time.

Q. I think that is probably true. You stated that you remembered seeing a sample of the Mead device in 1929. [fol. 80] I think you said.

A Yes, sir, '29 or '30. I wouldn't want to be limited to either of those two years. I am quite sure it was '29.

Q. And you prepared the application for the Cohen

patents in suit?

A. I did not. This one, I believe, I prepared. The second one I believe I prepared. The first one, my assistant prepared, under my supervision.

Q. Don't you usually supervise rather carefully?

A. Yes, yes.

Q. Do you remember the claim which you put in that original application?

A. No, I do not.

Mr. Byrne: It strikes me, if your Honor please, that this is wholly immaterial and clearly outside the scope of the direct.

Mr. Allyn: I think it is very distinctly pertinent. It relates to the gentleman's memory of what happened in 1929. I think we have documentary evidence that is different from his statement.

The Court: Admitted for that purpose.

By Mr. Allyn:

Q. I show you a bunch of papers. I presume you recognize the character of them.

A. Yes.

Q. Being a certified copy of an application for patent?

A. That is correct.

Q. This purports to be a certified copy of the file wrapper and contents of Cohen patent 2,117,703. This contains this claim.

Mr. Huxley: Pardon me just a minute. That is not one of the patents in suit, is it?

Mr. Allyn: No, it is the parent, alleged to be the parent of the patent in suit, 2,140,311.

The Witness: Yes, the first Cohen patent.

[fol. 81] By Mr. Allyn:

Q. Both of these patents show identically the same construction, Mr. Johnson?

A. The original and the divisional.

Q. Yes.

A. Yes, sir. The divisional omits the signalling.

Q. Omits an illustration of a signal circuit?

A. That is correct, and parts associated with it.

Q. This application as filed, its parent 2,117,703, contains this claim: "In an Electric Cigar Lighter, the combination of a base member, a removable plug supported by said base member, an igniting element on said plug, and a thermostatic catch for locking the plug in the base member until the igniting element is heated a pre-determined extent." Do you recognize that?

A. Yes, sir.

Q. And that claim was asserted when this case was filed, July 23, 1932?

A. That is correct. Yes, sir.

Mr. Byrne: If your Honor please, may this be admitted, subject to my motion to strike, because it has not gone to the point or place yet of attacking the credibility of the witness?

The Court: Very well.

Mr. Allyn: It is attacking the recollection of the witness. I do not mean to impugn any wrong intention on his part.

Mr. Byrne: That was the very theory on which you had it admitted.

Mr. Allyn: At least, to test his recollection.

The Court: Proceed.

Mr. Allyn: I would like to offer that for identification. I am satisfied to have what I read into the record, unless my brother insists on the entire file going in.

Mr. Byrne: I do not insist upon the entire file going in. [fol. 82] On the other hand, I now press my objection and move to strike out all this testimony respecting this matter.

The Court: What bearing has this got, Mr. Allyn?

Mr. Allyn: It shows that in 1932 when this application, the parent of this 2,140,311 was filed, that Mr. Johnson drew a claim for a device which reads word for word on the Mead construction.

The Court: Does it show that Mr. Johnson was the attorney?

Mr. Allyn: That Mr. Johnson was the attorney of record, and he is the President of the plaintiff company.

The Witness: Your Honor, if this tests my memory, may I say something?

Mr. Byrne: I will bring it out.

The Witness: All right.

The Court: Go ahead, Mr. Allyn. What is your claim?

Mr. Allyn: I claim that that shows that there was a strange hiatus in somebody's memory. If he had the device in 1929, of course, they should not have made that claim. If they knew about the Mead device in '29 they should not have made this claim in 1932. And I doubt very much if they had the Mead device in 1929. I do not believe that Mr. Johnson would have knowingly put that claim in there.

Mr. Byrne: If your Honor please, it seems to me that this is rather very, very far fetched. There is no doubt that these devices were extant by that time. It will be proven to your Honor a little later. It was proven in the Sinko case that they were there. But merely because a [fol. 83] claim of a purported scope found its way into an application, can hardly go to the extent of proving that Mr. Johnson was in error when he testified that he saw one of these devices in 1929, he believed. It seems to me the thing is entirely irrelevant, incompetent and immaterial, and I move to strike out all reference to it in the cross-examination of Mr. Johnson.

The Court: It seems to me the objection runs to the weight, rather than the admissibility. I will overrule the objection, and leave it in for what it is worth. Are you content that the reading may stay in the record in lieu of the physical exhibit?

Mr. Byrne: Yes, your Honoz.

By Mr. Allyn:

Q. In the second Cohen patent, I think you said that the coil 41 was a heater element, did you not?

A. That is the igniting resistance coil.

Q. Isn't it the heater element?

A. It is the heater that you use to light the cigar with.

Q. In the Cohen patent No. 1 you referred to the desirability of the members of the latch being matched, did you not?

A. No. No, you didn't express that right, if you are talking about matching. Members of the latch being matched?

Q. Yes.

A. No, I never said that.

Q. Didn't you say it was desirable, ordinarily, that the two members of a thermostatic device should be matched to each other?

A. I said this, that the spring, the ejecting spring, and the bimetallic latch should be matched. You see, it was desirable, as I understood it when I made those remarks, it was desirable to have them matched, and we had them matched. We put them out in matched pairs.

[fol. 84] Q. In what?

A. We matched the igniting unit against the holding device, if it was to stay that way.

Q. In other words, so that you would always have the

same plug in its socket?

A. That is correct. At that time when those remarks were made, that was the—

Q. The practice?
A. The practice.

Q. And that is the situation, is it, in this second Cohen patent?

A. You have got them-I thought you said this.

Q. No, I am just now saying the second Cohen patent.

A. No they are not matched there.

Q. They are not?

A. No. Oh, I see what you mean. Yes. The way this is constructed, and at the time I made those remarks, it was desirable to keep the igniting unit and holding device matched, because if you had a spring in the igniting unit which was too strong for the bimetal in the holding device it would not operate.

Mr. Byrne: You were referring to Exhibit 20? The Witness: Yes.

By Mr. Allyn:

Q. Was that the case in this first Cohen patent?

A. No, you don't have to have them matched there. Because in that specific construction of that patent as shown in the drawings, the spring, the ejecting spring 48, is in the holder, and so are the bimetallic fingers.

Q. So that you can use any plug in the socket of that

No. 1 Cohen patent?

A. Any plug adapted to fit.

Q. There was no critical relation, in other words, between the plug and the socket?

A. No.

Q. Whereas in the No. 2 Cohen patent there is a much more critical relation between the plug and the socket?

A. Yes, sir; yes, sir; that is correct.

Q. In your application for the Cohen patent No. 2, I find in the record this statement: "Applicant's problem [fol. 85] was to break the energizing circuit, and at the same time to accomplish a striking change of appearance in the combined lighter and socket. This last he accomplishes by throwing the lighter to an abnormally projectant and hence very conspicuous position, and one such as would naturally signal the readiness of the lighter for withdrawal for immediate use." Do you remember that?

A. Yes, sir, I remember that statement.

Q. In this Casco lighter, in Exhibit 19, is that plug in this abnormally projectant position as I show it to you?

A. As you showed it to me?

Q. Yes.

A. No.

Q. It was in the normal position in which it would be when riding in the idling position?

A. No, as a matter of fact, you showed it to me in closed-

circuit position.

Q. Closed circuit. All right. Now, it is in its normal idling position?

A. That is right.

- Q. Would you call that an abnormally projectant position?
- A. Those are not my words, and I would hardly go as strong as that. I had an assistant who was inclined to use strong words. I would say it was a projectant position, sufficient for the purpose to show it is not in. Just looking at it you can see when it is in and when it is out. I should say the projection was enough to be visually important.

Q. There is nothing abnormally projectant about it?

A. I won't take credit for those words.

Q. That plug has two definite positions in the Casco lighter, has it not, the normal one, the open circuit, and then the closed circuit with the plug pushed in; is that right?

A. Yes, sir, exactly as in the second patent. There is no difference. Just an thing that might have been said there is only a matter of words.

Q. The same thing is true of both patents?

A. That is right.

[fol. 86] Q. Both Cohen patents?

A. That is right.

Q. You made this statement in one of your file wrapper arguments: "For the further reason that there is no thermostatic element or anything else in Mead for locating the plug in the base member until the igniting unit is heated a pre-determined amount." Do you remember that?

A. Yes, sir.

Q. What did you mean?

A. Well, I meant just what it said. There is nothing in Mead for locking the igniting unit as I understood Mead without seeing, you know, without the device, the actual device in front of me. There is nothing in the Mead patent to lock it in its energized position. You can still pull it out. There is a detent there, or a holding device, that holds it against rotary movement, but there is nothing—as I understood it at the time, this patent of Mead—that would prevent a longitudinal movement of this igniter from the position shown in Fig. 15.

Q. Well, you do not understand they ever sold a device like that Fig. 15, do you, except possibly with the outside

casing around it?

A. With outside casing, yes.

Q. It would always be sold with a casing, would it not? A. Yes. Pardon me. I say those remarks were made with this in mind, rather than with the device with the cover in mind. As a matter of fact, any device with a cover you can still move the igniting unit from that definite position. You can still slide it out even in the on position, slide it out somewhat. You cannot slide it out completely because his key-hole slot, the little slot, would prevent it.

Q. If you slid it out, part way, looking at Sheet 2 of that Mead patent, if you pulled out the plug part way, the pin 75 as shown here in Figure 20, would strike the

casing, would it not?

A. Yes, if the slot was not extended. That is, if you let me have the model I can show you what I mean by that. [fol. 87] Q. Which one is that?

A. 12, I think.

In the Mead drawing, it does not appear that there is any slot in the casing, any short slot in the casing such as you see in Exhibit 12. There is a little V-shaped notch that the pin goes through. In the Mead drawing the whole knob goes into a hole in the casing, as you can see in Fig. 20. If the radius or the outside end of the pin is

no bigger than that knob, why, you can pull the Mead igniter unit directly out from elosed-circuit position, and that was my understanding, and that is why I drew that claim in the Cohen case calling for locking the igniter in closed-circuit position.

Q. But it is locked in closed-circuit position in this

Exhibit 12; is it not?

A. Yes, in Exhibit 12, it is. And I have drawn a lot of claims that, on second thought, read on prior art that I was well acquainted with, after the examiner called it to our attention. We see that we do that quite often.

The Court: I have that experience with the C. C. A.

(Laughter.)

By Mr. Allyn:

Q. Did you ever see a so-called Mead type lighter where the spiral coil was not thermostatic, the spiral coil spring in the base of the socket?

A. Was not bimetallic.

Q. Bimetal.

A. No. You mean the device purported to be made by Mead or Jessop?

Q. Right.

A. No.

Q. Do you know what the temperature limits are, of

operation of these thermostatic lighters?

A. Why, I am not in the Engineering Department, of course, but my understanding is they operate at around 1300 Fahrenheit.

Q. That is the coil, you mean?

A. The coil.

[fol. 88] Q. Heats directly?

A. I have never put a contact pyrometer on. I don't know.

Q. What are the limits of the atmospheric temperature in which they will function?

A. I don't know. I don't think there are any limits, Mr.

Allyn, or I don't understand you.

Q. I mean, are they supposed to operate, we will say, from 20 degrees below zero up to 120 Fahrenheit?

A. Oh, yes, yes.

Q. That would be necessary for a practical device?

A. Yes, I would say so. Even lower temperatures than

that. It does not matter how far down you go.

Q. Do you know why the Casco licensee brought out the form of the commercial type you have introduced here?

Mr. Byrne: That is objected to as immaterial, irrelevant, and incompetent.

The Court: Sustained.

By Mr. Allyn:

Q. Will you please examine that print and let me know what you think it is?

A. It purports to be a drawing of the Casco commercial

lighter.

Q. Well, so far as you know it is a correct delineation of one of the commercial forms of a Casco lighter?

A. Yes, except for minor details this is substantially it.

Mr. Allyn: Well, my reason for suggesting that this be introduced is that my friend hasn't introduced any drawing except a very large one, which is unsuitable for reproduction, and that is the only purpose I have in wanting to have something to which the Court could refer in a handy form.

[fol. 89] Mr. Huxley: There is no objection to it. It seems to be all right. It is subject to any correction, of course?

Mr. Allyn: All right.

(Defendant's Exhibit B: Drawing of Casco commercial lighter.)

By Mr. Allyn:

Q. Will you please examine this print and express your opinion of it?

A. Yes. This is a fair drawing of the Mead cigar lighter. I would !!ke to check it with 12, if you don't mind. (The witness examined an object.) Yes, Plaintiff's Exhibit 12.

Mr. Allyn: I should like to offer that for the purpose of identification. It is a print of one of the forms of the Mead device as offered by my brother. I know nothing about the source of it.

(Defendant's Exhibit C for Identification: Print of one of the forms of the Mead device.)

Mr. Allyn: That is all.

Redirect examination.

By Mr. Byrne:

Q. Mr. Johnson, some question was raised with respect to Exhibit 7 in the Sinko case, which is exemplified by Exhibit 12 in this case. Will you state the circumstances under which you acquired that exhibit from The Casco

Company at its laboratory or wherever it was?

A. Before we went on trial in Chicago and I went out to Mr. Huxley's office, I went out to the Casco plant and went to the drawer where they have the cigar lighters, and I took that cigar lighter out and I kept it in my possession separate from anything else. It was the only Mead cigar lighter I had at that time, so when I testified out there I felt absolutely sure that it was the same one we had before us in 1929.

[fol. 90] Q. You had one before you in 1929, you say?

A. Yes.

O. The question has arisen here as to whether it was in 1929 that you received it. Tell me the circumstances, if any, surrounding the examination of this device in 1929.

A. Well, I believe it was the fall of 1929 or the spring of 1930, Mr. Cuno's company came out with quite a different kind of manual wireless lighter, and Mr. Cohen and I were looking through the devices we had in the museum for another lighter which we thought embodied some of the features of this Cuno lighter, and it was at that time that we ran across and discussed this Mead lighter.

By the Court:

Q. What fixes the date 1929 in your mind?

A. Because that was the year when Mr. Cuno's company came out with that lighter.

Q. What lighter?

A. The one—I haven't quite characterized it. I have a print of it. I think they call it their 1930 model lighter.

By Mr. Byrne:

Q. It was in connection with the coming out of that lighter that you went to the laboratory of Casco and saw this Mead device?

A. Yes, sir. That is correct.

Mr. Byrne: Have you one of those devices here Mr. Allyn?

By Mr. Aliyn:

Q. Wasn't that 1690?

A. I think 1690 is the one.

By Mr. Byrne:

Q. Mr. Johnson, I observed in the Mead patent that there is an enlarged base portion but that in the device like Exhibit 7 and in the Sinko case in Exhibit 12 the ferrule [fol. 91] seems to come straight down and have a spring on the outside of it. What have you to say about the constructions being substantially or not substantially the same?

A. I think it is the same in principle. If you found that the bimetal spring annealed because it was too close to the heating element, you would move it a little further away and put it on the outside of the sleeve instead of inside.

Q. During the time that this claim from a prior application was being read to you on cross-examination you seemed to have in mind some explanation to make at that time. If so, make it now.

A. I think I made the explanation that the claim did not read on the Mead patent, because there was nothing in the Mead patent to lock the igniting unit against being pulled out.

Q. Will you illustrate that feature by reference to Exhibit 7 in the Sinko case, which is the same as Exhibit 12, from which I have removed the casing?

A. I am moving the igniting unit to closed-circuit position, in which it would be held while heating up. If you changed your mind you could pull it straight out without rotating it back.

Q. Now, on cross-examination you were asked the question if you knew of any automatic heater on the market that did not employ a thermostatic element. I think that was the question, was it not?

A. I don't recall. Possibly I didn't get the question.

(The last question was read.)

The Witness: I was asked that question, yes.

Q. And you gave that answer?

A. There are none on the market.

Q. I think I have not made myself very clear, I thought that the substance of your testimony was that there is no

[fol. 92] automatic cigar lighter on the market that does not employ a thermostatic element.

A. Your statement is correct.

Q. Is that a comparatively new venture on the market? That is to say, within the last two or three years?

A. I don't know what you mean.

The Court: He just said that there was no automatic without a thermostatic device.

Mr. Byrne: Yes. Then I asked the next question, if that wasn't comparatively recent.

By Mr. Byrne:

Q. Didn't that come on the market with the Casco device in 1936?

A. The automatic cigar lighter with the thermostat came on the market with, or in, the Casco lighter in 1936, yes.

Q. Of course this was preceded by the Mead device which we have been talking about?

A. Yes.

Q. And was followed, incidentally, by Sinko and by Cuno, the defendant here?

A. Yes.

Q. Are there any others on the market that you know of?

A. There is another.

Q. More than one other?

A. One is all I know of.

Mr. Byrne: I think that is all I have.

Recross-examination.

By Mr. Allyn:

Q. Is this the Cuno device that you referred to as having seen when you hunted and found the Mead device (handing an object to the witness)?

A. Yes, that is the one or something very much like it. Yes, sir, I believe that is it. That is my present recollection

anyway.

Q. You mean that you saw it on the market commercially in 1929 or 193.)?

A. I don't know whether it was on the market commercially. I know that we had one. How we got it I don't

[fol. 93] know. Sometimes we get them before they are on the market commercially. One of the suppliers must have given it to us.

Q. Would you say that the contacts on the bottom of the socket are coaxial?

A. Yes, sir.

Mr. Allyn: I should like to offer that as a Cuno early lighter. It is one that Mr. Johnson says he recalls having seen prior to finding this alleged Mead device in his collection.

The Witness: That is right.

(Defendant's Exhibit D: Early Cuno lighter.)

Mr. Huxley: That is admittedly non-automatic?

Mr. Allyn: It is not automatic, no.

By Mr. Allyn:

Q. From what you said, Mr. Johnson, I take it you feel that the Mead lighter would have to have some kind of a cover on it in order to be of any use, is that right?

A. No, I wouldn't say that. It depends on where you

want to use it and how you want to use it.

Q. What if you wanted to use it on an automobile?

A. Well, I would certainly put a cover on it.

Q. You couldn't sell them unless there was a cover, could you?

A. Hardly.

Mr. Allyn: That is all.

By Mr. Byrne:

Q. Well, Mr. Johnson, would it be operative without a cover?

A. Certainly.

Mr. Byrne: That is all.

The Court: Let us break the afternoon here.

(There was a short recess.)

[fol. 94] Mr. Huxley: Mr. Cohen.

JOSEPH H. COHEN, called as a witness on behalf of the plaintiff, being first duly sworn by Clerk Carroll, testified as follows:

By Clerk Carroll:

Q. Your name and address?

A. Joseph H. Cohen.

Mr. Huxley: If the Court and counsel have no objection, I will ask a few leading questions on matters regarding which there is no dispute.

Direct examination.

By Mr. Huxley:

Q. Your name is Joseph H. Cohen?

A. That is right.

Q. You live at Bridgeport, Connecticut, and you are the President of the Casco Products Corporation?

A. I am.

Q. Which is the licensee under the three patents here in suit. That is correct, is it not?

A. That is right.

Q. And it is also correct, is it not, that about 1922 or 1923 you entered the cigar lighter business, that the type of cigar lighter that you first made was the so-called reel type, that is where the cigar lighter was attached by a cord and coiled up on the reel, and to light the lighter the cord was pulled out and the lighting was performed that way?

A. That is correct.

Q. That was the first type you made?

A. That is correct.

Q. Then beginning about 1927 and 1928, you and your company, the Casco Company, went into the manufacture of the so-called wireless non-automatic manually-operated cigar lighters of which Plaintiff's Exhibit 17, which has [fol. 95] been introduced in evidence, is a typical one. That is correct, is it not?

A. Yes, that is right.

Q. And that manufacture of non-automatic lighters was continued until about 1936, whereupon you went into the manufacture of the automatic wireless type of lighter

which is exemplified, of which a typical one is shown, by Plaintiff's Exhibit 19. That is correct, is it not?

A. That is correct, with the addition that the non-automatic lighter continued to sell after '36.

Q. Yes, and later I will go into the extent of the sales, but just I wanted to get the general picture at present.

Now, Mr. Cohen, you have heard Mr. Johnson's testimony with regard to seeing one of the so-called Mead Cigar Lighters, which was exemplified by the actual original Exhibit 7 in the Sinko case, and Plaintiff's Exhibit 12 in the present case. What is your recollection about that?

A. I recollect very clearly the incident when the Mead Lighter was first called to the attention of Mr. Johnson and myself. We were, at that particular time, looking for lighters through our collection. We have a little department wherein we collect all of the lighters that make their appearance on the market. Our salesmen and customers send them in to us, and if anything new appears we just review them then and put them in this little stow-away, and very often refer to them.

This time we were looking for another matter having to do with a cigar lighter, and in fumbling through and searching for just what we wanted the Mead lighter was then discussed casually, and I remember clearly having stated that one day that would be the way to do it, and it was passed over rather lightly at the time, since it was—

Q. How nearly can you place the date when that incident occurred?

A. I can establish the date, not exactly. But having started the manufacture of the cordless lighter, the wireless, in 1927, we had a very successful period of a number of [fol. 96] years. And particularly, in '28 it attracted so many into this business that we were pretty busy trying to find out where we were at. And I would say that from the best of my recollection, that it was sometime in the winter season of '29, and I can only tie that up with an experience of the movement of lighters and changes, and knowing that it was after a very successful year in which we had more business on a lighter known as the "600" than we could actually supply. And that attracted others into the field, and it necessitated our going through this collection of lighters with the idea of making further improvements. And it was that year that we brought out.

wherein we converted or inverted, rather, the open-face wireless lighter and reversed it so that the heating element would not be unsightly after use.

Q. But concealed as in Exhibit 17?

A. But concealed, and I remember clearly that that was a 1929 creation if I can remember, and it was in that year, I am pretty sure.

Q. Would you say it was within a year or so of that?

A. I would say that my best recollection is that it was in the winter season of 1929.

Q. After you had seen this Mead lighter, what did you do then in regard to lighters?

A. At that particular time, why, I did not think a great deal of the lighter as it was, since I knew we were confined to a very limited space, and it looked like it was an impossibility to introduce the mechanism, as I thought existed. As a matter of fact, I just took it for granted that it was chock full of mechanism as the size indicated, and so I just passed over it. But it was responsible for my striving in the direction of creating an automatic lighter that I knew was very necessary because of the many objections to the manually-operated lighter.

And so I took it to bed with me, so speaking, night after night, and then along in 1931, oh, very nearly a [fol. 97] couple of years later, I actually had some difficulty in falling asleep and couldn't get this automatic lighter out of my mind. And finally it presented itself as if I could pick it up. And I thought I could dismiss the whole thing then, and do it the first thing in the morning. But I still was annoyed with it and finally got up about 3 o'clock in the morning and sketched it, and then went back to bed.

Q. After you had done that, did you cause any of the actual lighters to be made in your factory? I mean in further development of whatever ideas you might have had?

A. The first thing I did was to send for Mr. Johnson the very next morning, with the idea of patenting, filing a patent on what I thought was the greatest thing in the world, and immediately proceeded to make samples. And I could easily produce in this Court a hundred more various types that we made before we actually made a successful lighter.

And then we had another problem of making sure beyond any shadow of doubt that these lighters would be faultless, because we had established what I believed to be an enviable reputation with the car manufacturer, and that was no easy task, and we did not want to do anything that would in any way jeopardize our position with the car manufacturer, that had taken so long to establish.

And so, knowing as I do and did, because of experience, that no new article can be made without some bugs cropping up in it-and I was determined to do that, to actually eliminate the bugs in the lighter. And so a prolonged experimentation was undertaken, and we had actually tested these lighters in our laboratory after making a successful one, to where it would outlive the car. And we have operated innumerable lighters upwards of 26,000 times. And to accomplish that was not easy. And we had tried so many types and shapes of thermostats, and finally got the Precious Metal Company up here in Massachu-[fol. 98] setts to make some bimetal for us that would act as we wanted it to in our lighter. And I might add that they were successful in doing so and told us this was the first time that a thermostat was used as a mechanical means for holding the component part and acting as a thermostat.

And we have made since then, of course, millions of them.

Q. Now, in the course of your development, did you confer with Mr. Johnson, or what did you do in regard to the patent situation?

A. Well, I thought as I already stated that I had the

most wonderful patent in the world-

The Court: Please confine yourself to the question. Read him the question.

The Witness: All right. Will you restate it?

By Mr. Huxley:

Q. I will restate the question. What did you do in regard to the patent situation?

A. Mr. Johnson, who had filed-

The Court: The question is, what did you do? The Witness: In regard to the patent?

The Court: Yes.

By Mr. Huxley:

Q. With regard to the general patent situation?

A. Well, I turned the matter over to Mr. Johnson, who had filed the patent as he had others before. And my point was—

The Court: The answer is, "You turned it over to Mr. Johnson."

The Witness: That is right.

[fol. 99] By Mr. Huxley:

Q. Did you receive any report from him?

A. I did. He made it known to me that the Mead patent existed, and in his opinion that we were up against a stone wall, in his language, and advised the purchase of the Meade patent.

Q. Was it so purchased?

A. It was.

Q. When was it that this automatic type was put on the market finally?

A. In 1936 was the first time that it was sold.

Q. Will you briefly tell us what contacts you had with the car manufacturers at that time and just prior to put-

ting it on the market?

A. I happened to be in Detroit making some calls with our Mr. Sinciair, and we were at the Packard Motor Car Company at the time—who had had samples of our automatic lighter. And up to that moment there was no request for deliveries of the lighter, and on our way out I remember clearly that we met Mr. Belts, the Chief Engineer, the Body Engineer rather, of the Packard Motor Car Company, and leasked me in these very words, "When are we going to get the automatic lighter?"

I was a little bit embarrassed, because I was with the Purchasing Agent, and up to that time I had no orders. And he let me known then and there he had written the automatic lighter into the specifications, and he was looking forward to us for delivery.

And we, of course, turned back and got an order from Mr. Hittle and proceeded to manufacture the automatic lighter. Up to that time we had not made or sold any.

Q. Had you been soliciting orders up to that time?

A. We had not. We were not quite ready to make it known to the automotive industry as a whole, and felt that if we were to give it to one or two, that we might be considered [fol. 100] as showing partiality, and earn the ill will of some of the manufacturers.

After taking the business at the Packard Motor Car for that year, Mr. Sinclair had disclosed the fact to the Chevrolet Motor Car Company, who also insisted that they must have it for that year. And now we found ourselves with orders for two companies.

And since Chevrolet produced a large quantity, we were reluctant to divulge it to any other car manufacturers for that year, because we knew we could not revolutionize this whole situation in one season.

So we confined our manufacture that year in '36 to Packard and Chevrolet.

Q. At the time when you went into this manufacture, was any additional investment required at your factory to make this automatic type?

A. Considerable, I would say. Up to the present day I would say that our tools and equipment peculiar to the manufacture of automatic lighters, is very near a half a million dollars.

Q. Is that in addition to the equipment that you have to make the non-automatic type?

A. Yes, it is.

Q. What was the comparison between the price at which the automatic lighters sold as compared with the non-automatic type?

A. The differential in price was 10 to 15 cents.

Q. Which sold the higher?

A. Depending upon the construction of the knob and the length of the pig-tail, the amount of wire, and so on and so forth outside of the lighter.

Q. That is, the automatic sold from 10 to 15 cents higher than the non-automatic lighter, is that correct?

A. That is right.

The Court: 10 or 15 cents apiece. The Witness: That is right.

Mr. Huxley: Higher.

[fol. 101] By Mr. Huxley:

- Q. That is about what percentage on it?
- A. About 25% higher.
- Q. About 25% higher?
- A. Than the non-automatic.
- Q. Mr. Cohen, I am showing you a chart indicating the sales of the non-automatic and automatic types. Will you state whether the figures on that were made up under your supervision, and whether that correctly shows a comparison of the sales of the non-automatic as related to the Automatic for the years 1933 up through 1938.

A. I requested these figures, and this chart was presented to me giving me—or the figures were given to me rather,

which are clearly shown here in these columns.

Q. I notice, for example, for the year 1933 and 1934 the same number given, 827,000 and 90 for each year. For those two years were the years kept separately, or just

the two years together?

A. Well, you see '33 and '34, the fiscal year for the change-over, the new car is affected by both '33 and '34, and that could work out that way. And it does each year. '35 would last over into '36. The models are usually brought out in the fall of the year and they go over to the next fall. They usually take in two years, and their working out exactly is purely coincidental and I wouldn't know how to account for it other than the figures that I have are produced by competent—

Q. This chart, as a matter of fact, goes up through 1938, and shows that in that year there were 977,000 automatic sold and 181,860 of the non-automatic type. How

is that condition continued through 1939?

A. As rapidly as we could make it possible, we took on additional business and replaced the non-automatic lighter with the automatic lighter. And since it was highly desirable in every instance, and there was no resistance [fol. 102] whatsoever, it was a matter of being ready; and it was acceptable on sight almost, after reasonable tests were made, which is usually the custom, the lighter was specified, the automatic lighter.

Q. Are most of your sales made to the car manufacturers for standard equipment, or are they made for socalled service sales, that is, sales directly or indirectly to the users of the cars, in distinction from having the lighter

put on the car as it is made at the factory?

A. The majority or the largest part of our manufacture is for standard equipment, and some of it is sold by the car manufacturer through his service sales, in addition to the equipment for cars of the previous years that were not equipped with automatic lighters.

Q. What percentage, very roughly, of your sales would

you say were made to car manufacturers?

A. Oh, at the present day?

Q. At the present time.

A. Recent times, I would say 95 or 98%.

Q. And has that been true for several years?

A. That has been true ever since the automatic lighter has been in existence, and partially true of the non-automatic lighter.

Q. Tell us about just roughly whether there is any material number of non-automatic lighters sold by you to-

day, non-automatic, the non-automatic type.

A. The only non-automatic lighters that we make today, to the best of my knowledge, and I am pretty certain, and that is the few that we sell to Henry Ford, or the Ford Motor Car Company rather, for the low-priced Ford; that is, there are DeLuxe Fords and then Mercuries, etc., and so on, who take the automatic lighter. But the lowest-priced Ford cars still take the manually operated lighter.

Q. And have you the equipment to make the non-auto-

matic type now?

A. Yes.

[fol. 103] Q. And then this equipment for making the automatic type, is that—

A. Entirely apart from the other.

Q. Entirely different?

A. Yes, it is.

Q. Now, in this problem that you had, you were selling to car manufacturers largely, as I understand it. And what was the requirement in regard to the lighter that went to these car manufacturers in regard to shape and size?

A. The heating element holder, as we call it, that is the well, the part that fits into the instrument panel, had to be of the same size and diameter as that of the non-automatic type. Since room, facilities to receive the lighter, was limited, we were confined to that particular size.

Q. Will you state the reason again why you considered that you could not use this original Mead type of lighter such as the one that you hold in your hand, Plaintiff's Exhibit 12?

A. Well, my first observation was that it was much too large and I did not think it was possible to confine all that I thought was in this device into the well that was necessary for the car manufacturers.

Q. How about the operation of the Mead device?

A. Well, the operation, I had not given that much thought. I just took it for granted that it worked.

Q. How did it operate? Did it operate? Tell us how it

operated.

A. Well, I didn't know, and still do-

Q. It is an automatic lighter?

A. It is an automatic lighter, and the method is to turn it clockwise, and when the heating element is up to proper incandescence it just snaps into a neutral position ready to remove from the base or holder.

Mr. Huxley: I want to offer in evidence this chart of sales, as Plaintiff's Exhibit 26.

(Plaintiff's Exhibit 26: Chart of sales.)

[fol. 104] By Mr. Huxley:

Q. Something has been said here about advertising. I wish you would tell us exactly what the Casco Company, as manufacturer, and in connection with the plaintiff, has done in regard to advertising these automatic lighters.

A. About a year later, within a couple of weeks of a year from the time we had first sold Packard and Chevrolet, we decided this would be a splendid opportunity to acquaint the general public with the automatic lighter, and we decided to go into a national advertising campaign, and we did. But after trying as we did to create a demand in the face of all these full-page ads, we were startled to find that we could not get anywhere, and we finally had to stop the whole campaign, after expending considerable money. And we had the advertising agency go out and find out why we were not doing what they thought we should do.

And what we finally arrived at was the lighter looked exactly as the lighter on their car, and they being familiar

with the lighter, the non-automatic type, that we had created an impression that we merely dolled up a non-automatic lighter and that there was not any additional advantage, and we just couldn't get that thought over to the

public.

And we find now that there is a demand, a natural demand, that has been created from word-of-mouth advertising. One rides with another, and much to his surprise he finds that the automatic lighter is everything that he desires. And we have made physical tests in the field, to the extent that I am satisfied in my mind the advertising campaign was a failure because of the great similarity between the two lighters, and that it was all concealed behind the instrument panel, and that they looked alike, so much so that they just took it for granted.

[fol. 105] Q. When did you start this advertising of the

automatic?

A. Why, I would say in April or May of 1937.

Q. 1937 1

A. Yes.

Q. That was after you had made some sales to the Packard Company, and so forth?

A. After we had signed up Packard and Chevrolet.

Q. How long did you continue that advertising?

A. Oh, I would say to the best part of 1937—up to the end of 1937, and we short-rated all the ads, so to speak, and cancelled them off.

Q. Is it correct that since the beginning of, say, 1938, you have done practically no advertising on this automatic

type?

A. Absolutely none. I might correct that and say there may be some trade-paper advertising along with all of our things that may appear, but I wouldn't know, because it isn't expensive advertising—twenty-five dollars against ten thousand dollars for "The Saturday Evening Post."

Q. You are thoroughly familiar with the sales policies that govern the sale of these by The Casco Company, are

you not?

A. Somewhat. Not as much recently as heretofore. The sales are handled by Mr. Cochrane, but I am generally familiar with it.

Q. I think you said that about ninety or ninety-five per cent of these automatic lighters are sold to car manufacturers? A. I do know that because that is the side of our business that I am familiar with.

Q. In your judgment has any advertising that you have done had any influence on the sales to car manufacturers?

A. I would say no, none whatsoever. The car manufacturer isn't interested in what advertising you do for such articles that he puts on his car as standard equipment. They won't let you refer to them. They won't let you use their name, stating that the car is equipped with it. They will, in some cases, but they generally won't. If you do, you have to get their permission.

[fol. 106] Mr. Huxley: I think there is no question about this and I think we can stipulate it: That in the year 1935, to wit, on the 1st day of May, 1935, The Casco Products Corporation granted a license under various patents to the Cuno Company, which license has since been cancelled. This is the only material thing: There is in paragraph one the following sentence:

"It is understood and agreed that in the license herein conveyed no rights are granted under the Mead patent 1,736,544, or any other patent whose structure is dominated by the claims of the Mead patent, nor the right to manufacture and sell complete replacement heating units having a special thread and diameter to fit such constructions."

Will you be good enough to stipulate that? It is a fact. Mr. Allyn: I know that that particular point is a fact. With it there should go a similar admission that Cuno's license to Casco did not grant Casco any rights to any automatic lighters of the Cuno Company.

Mr. Huxley: Quite correct. We so stipulate. The only materiality is that in 1935 all about this Mead patent was

known.

By Mr. Huxley:

Q. We have had demonstrated here one of the Casco automatic lighters, which seemed to be in a condition whereby the igniting element jumped completely out. Is that a common condition in these automatic lighters made by The Casco Company? Tell us whether or not it is common.

A. No, indeed. They are tested in a vertical position with a weighted member, so that if that were true we would know it.

[fol. 107] Q. Would that in your judgment be an extremely unusual occurrence?

A. It couldn't leave our plant in that condition. What has happened here, if you wish to know, is this. It is simple enough to take these little lances, as we call them, and deliberately push them in, and naturally you have lost the value of them. The purpose of these lances is to create a friction, and we have operated those lighters twenty-six thousand times, which is, truthfully, about four years' service, about fifeen operations daily. That is how we compute the life of the lighter, and during that period they don't fall out. When we test these at the factory we have a weighted metal knob and they are tested in this position, and yet they won't come out.

As a matter of fact, if they did the car manufacturer would soon let us know if something had to be done. That

could not exist.

Mr. Huxley: That is all.

Cross-examination.

By Mr. Allyn:

Q. They could not be sold if they were loose like that, could they?

A. No, I would say not.

Q. I think you said that you had invested something like

\$500,000 in special tools.

A. Tools, jigs, and fixtures. By that I mean machine tools as well, if you are familiar with what I am getting at. I mean dies, tools, jigs, fixtures, and machine tools, which would take in presses and all tools peculiar to the production of the lighters, such as screws.

Q. What kind of tools different from those used on the non-automatic are required for the automatic? Anything beside those required for making the thermostatic latch?

A. Yes, decidedly so. I will be glad to tell you. Where the dimensions differ, even to a very small degree, you will [fol. 108] appreciate that a new set of tools are required. That is a fact, and that is information you can obtain from any mechanic.

Q. That doesn't make the machine any different from the type that you had for the old non-automatic?

A. Yes, Mr. Allyn, that does. I can describe one of a number of instances, if you like, where a special machine

was bought—a number of them—all of which is easily accessible. Shall I describe any of them?

O. I should like to know why there is anything peculiar about the manufacture of this device other than, possibly, in the way you make that thermostatic latch.

A. I will be glad to relate the whole manufacture to you.

Q. No. Just name some one important distinction.

A. Let us start with the most important part of the lighter—the thermostat. We find that in order that the thermostat be made accurate-it must be accurate-you have two choices, one of making a dozen individual sets of tools, all of which would be one and the same, or by what is commonly known as a multiple plunger machine; an eyelet machine also has the same methods. Making up an eyelet machine lowers, of course, the cost and makes for greater accuracy.

Now, then, were you to make it the old-fashioned way, with individual tools, there are about a dozen operations required and it would mean a dozen processes and a dozen individual sets of tools. In the eyelet machine this thermostat is made in a six-plunger machine, so that we have six plungers coming from the top down and we have six motions coming from below it-with an under-motion and over-motion—which makes it possible to produce that particular article in one machine.

Q. Excuse me just a minute. I realize that there is a difference in the way you make that thermostat, but I wanted to know what other machine was necessary if it [fol. 109] was at all different.

A. I can't tell you two at the same time.

Q. I have sufficient on the thermostat.

A. All right, we will move on to the well.

You take up the well of the automatic lighter and that of the non-automatic, and to all outward appearances they are one and the same. We bought a ten-plunger eyelet machine that cost us \$19,000 and some odd dollars and the purpose of it was this: Simply to create the accuracy required in the well, because the timing is tied in with the friction, and if the wells vary, which they will do as made in the common way where a wide tolerance is not important, but in that case it is all right.

Now, in this ten-plunger machine three of the last operations are purely sizing operations. They go in and out of the tools to iron them out, making it possible to produce wells that are accurate to a thousandth of an inch.

I dare say that in a non-automatic lighter a spread of ten thousandths would not impair the working of the lighter, so that if we didn't have that machine tool we would have to perform those operations known as sizing operations.

Furthermore, if you didn't take that slow process or that multiple series of operations in producing the well, you would work the metal so severely that you would crystallize it, and while they may be all right today, you might walk to your plant and the spasm in the metal created by the stress and strain of working the metal too fast would cause it to crack like glass, and you might lose three months' production that you may have built up; so that you must work the metal slowly, as your organization is familiar. I say, your organization. I mean Mr. Cuno's organization is familiar with the fact that if you buy a machine which has sufficient plungers you don't work the metal too severely in any one move, resulting in a perfect well at [fol. 110] the end of the operation. I can go on if you like.

Mr. Allyn: If your Honor please, I have heard enough. I don't know whether your Honor wants any more of it. I am satisfied with his answer.

Q. You stated that you made your first standard car equipment sale to Packard?

A. That is right.

- Q. I believe that was in the fall of 1937?
- A. No, I am very definite that it was in the mid-summer -early summer of 1936.
- Q. I think you said that you had it on the market for about a year?

A. Yes.

Q. Before you sold to Packard?

A. No. I am sorry. I am sure you won't find in the record that I made that statement.

The Court: He said it was just about within a year after he sold the Packard that he started advertising.

By Mr. Allyn:

Q. Do you recognize that sheet (handling a paper to the witness)?

A. I have seen so many of these, truthfully. This looks like something we may have used at our sales meeting in

anticipation of the advertising campaign. We convene each year in Chicago, as you also know.

Mr. Huxley: We are willing to stipulate as to any printed

publications.

The Witness: This is a forerunner that we give to our salesmen, acquainting them with an advertising campaign that we are about to launch. I haven't scrutinized it, but I will be glad to tell you if it is or not.

[fol. 111] By Mr. Allyn:

Q. Isn't it, in fact, a copy of a page dated February,

1937, of some national advertising?

A. Let me say this to you, Mr. Allyn: These may be proofs, but very often our printers will print enough of these to pass round. We have forty odd men in our organization, and we convene each year and much is talked about the things we are going to do the following year, and this could be—Mr. Cochrane, who is here, could tell you the whole story. He is the sales manager of our company. He could give you the exact purpose of that sheet and when it was introduced.

By Mr. Huxley:

Q. Mr. Cochrane is the sales manager, is he?

A. Yes.

Mr. Huxley: There is no doubt that there were these advertisements. If there is any question you would like to ask about them, all right.

The Witness: You see, we have to place advertising six to eight months in advance of the ads appearing, and that is why you might deal with earlier dates, but we have contracts in our office that we would be glad to present.

Mr. Byrne: Casco advertised in "The American Weekly," about which you inquired, in about July or August, 1937, Mr. Cochrane apprises me. This is a full-page advertisement that we had in what we termed a trade-paper magazine, announcing our national consumer advertising.

The Witness: We show the magazines we are going to use in the advertising campaign, such as 'Collier's,' 'Life,' 'Saturday Evening Post,' and so forth. It is a prelude to an advertising campaign.

[fol. 112] By Mr. Allyn:

Q. That is the campaign to which you referred in your direct examination?

A. That is right.

Q. And the same thing would be true of this full-page advertisement in "The Saturday Evening Post"?

A. No. This looks like a page such as I have seen in The Saturday Evening Post. That is a page as it appears in the "Post." The other paper you referred to, the earlier one, showed the magazines that we are going to use in the campaign. This shows the article in use.

I can give you some dates that Mr. Cochrane gave me, if you like. There is exactly the dates that the campaign went on. He just gave it to me this afternoon. He telephoned the office in anticipation of what you stated earlier in the case. There are the figures and the dates.

Mr. Allyn: I should like to offer in evidence the two sheets referred to by the witness. I believe it is stipulated that these were samples of advertising issued by the Casco Products Corporation in the spring of 1937.

Mr. Byrne: So far as the advertisements coming from "The Saturday Evening Post" is concerned. The other

sheet was contained in an automotive trade-paper.

Mr. Allyn: Of February, 1937?

Mr. Byrne: That is right.

The Witness: That publication only goes to the dealers.

The Court: I understand that the plaintiff concedes that "The Saturday Evening Post" page was published in April, 1937.

Mr. Byrne: We don't know about the date, but along in

that period. In 1937.

Mr. Huxley: Isn't that the date on it?

[fol. 113] Mr. Allyn: No, the page does not have it.

Mr. Huxley: But that was out of that issue?

Mr. Allyn: That is correct.

Mr. Huxley: All right, we stipulate.

Mr. Byrne: I am advised that the advertisement referred to appeared in "The Saturday Evening Post" some time after May, 1937.

Mr. Allyn: In the spring of 1937.

Mr. Huxley: I will change the stipulation to the spring instead of April 10, because there seems to be some dispute about the date.

Mr. Allyn: I will offer these in evidence as exhibits.

(Defendant's Exhibit E: "Saturday Evening Post" advertisement.)

Mr. Allyn: Exhibit F is the sample of the trade-paper advertisement.

(Defendant's Exhibit F: Sample of the trade-paper advertisement.)

Mr. Huxley: While we are on the subject, I think we can straighten it all out.

By Mr. Huxley:

Q. Are you familiar with this memorandum (handing a paper to the witness)?

A. Mr. Cochrane presented me with it.

Q. Is that correct?

A. I would have to accept it as being correct. Mr. Cochrane got it from our office.

Mr. Huxley: Are you willing to accept it this way?

Mr. Allyn: What is it?

Mr. Huxley: It is the actual dates when these things happened.

Mr. Allyn: I have no objection to putting it in that way.

[fol. 114] By Mr. Huxley:

Q. Tell us about that, will you, Mr. Cohen?

A. Shall I relate the contents of this?

Q. Yes.

A. First deliveries to Packard were in May of 1936, and our first deliveries to Chevrolet were in July of 1936. Tradepaper advertising appeared in February of 1937 and consumer advertising in April of 1937.

Mr. Huxley: As I understand it, that is agreed to without the necessity of further proof, is it not, Mr. Allyn?

Mr. Allyn: Yes.

By Mr. Allyn:

- Q. Isn't it also true that you advertised in "Life" in 1938?
- A. I wouldn't be sure. We cancelled off our advertising as soon as it could be cancelled. In other words, if we could

take our short-rate and cancel it, that is what we did, and if the contract had been let for a period of time where it could not be cancelled off, there was nothing else to do. In other words, the advertising——

Q. In other words the advertising did not draw?

A. It just didn't do a thing.

Q. You issue a catalog, don't you?

A. Yes. I would call it catalog pages in the form of a leaflet. We don't issue them. We give them to our customers who handle our wares.

Q. Well, you have the catalog printed?

A. We have catalog pages, and if they buy that article we insert this thing or send it to them and they insert it in their own binder. We don't issue a catalog. This is for salesmen's purposes, but if a customer buys these articles we send these pages and he inserts them in his binder and makes up his catalog. We don't issue a catalog. [fol. 115] Q. What I have just shown you is a series of loose-leaf sheets issued by your company?

A. Yes. Substantially a catalog in one sense of the

word, I suppose.

Q. Examine it carefully and see if you know when it was published.

A. Which article?

Q. I had particular reference to the pages showing the cigar lighters.

A. These are cigar lighters that we made for twenty odd years down here (indicating). Do you want to refer to the automatic lighter or——

Q. All the lighters in there.

A. These are manually-operated lighters, and I don't see anything here that would indicate the date.

The Court: Couldn't we cave time by your putting that question to some one else in the room?

Mr. Byrne: Yes. Mr. Cochrane is here.

The Witness: If the date is on there, isn't that sufficient evidence of when it was printed?

Mr. Huxley: Whatever the fact is, we are willing to admit it.

The Witness: That is out of my department.

The Court: Let us finish the examination of this witness, and if anybody wants to call somebody else he can.

Mr. Huxley: I should like to call one more witness.

The Court: Are you finished with this witness?

Mr. Allyn: I am through on that point.

The Court: Why not finish with this witness? Mr. Byrne: We may be able to concede this.

Mr. Allyn: The answer is that Mr. Cohen does not know.

If that is his answer, all right.
The Witness: Yes, I don't know.

Mr. Allyn: That is all.

[fol. 116] Redirect examination.

By Mr. Huxley:

Q. Mr. Cohen, you testified in regard to the way in which during 1936, as shown by this chart, the automatic lighters replaced the non-automatic ones. Will you state very briefly the advantages in operation of the automatic over the non-automatic that resulted from that?

A. I will be glad to. In the manually-operated lighter you have to hold the lighter in until it is ready to use. Very often you get a cold light, because you haven't held it long enough, or the contact has become oxidized, and you don't get a fast light, and you withdraw the plug or the heating element and pull it too soon and the tobacco sears on to what we call a cold light and holds the tobacco and sparks fall over your lap, and very often it destroys flimsy wearing apparel, particularly with the women, burning holes in their stockings, and so forth.

With the automatic lighter the light is very definite. The light is controlled by the temperature created through the heating element—the resistance element—and when it reaches the proper temperature it causes the bimetal to flex and the lighter is clicked out into a neutral position, ready to use, so that you have an audible warning and a

perfect light each and every time.

With the non-automatic lighter very often the heating element is held in contact too long, and upon removing the heating element it has reached such a high degree of temperature that it will often fall out of the container—the heating element container or shell—and in one instance that we have on record the Chrysler Motor Car Company was sued because the red hot element fell between the shoe and heel and caused a dreadful burn, and a lawsuit followed. We have other instances of cars actually being wrecked because of the distraction through the use of a

manually-operated lighter, and there also was a lawsuit [fol. 117] brought by a Californian, one of our customers, the Western Auto Supply Company. We suffered quite an expense in settling the suit. It was already scheduled for trial when we came to the rescue of our customer and paid the damage.

The Court: Let us get on with material matters.

By Mr. Huxley:

- Q. Are there any other advantages that you think off A. The advantage of the antomatic is that you can press the lighter in anticipation of wanting a light and drive with both hands on the wheel until such time as the lighter clicks, which indicates that it is ready for use, and to reach down, pick it up, and get your light, without being distracted from the road, or in any way interfering with your driving.
 - Q. Does that cover it, you think?

A. I would say so, yes.

Mr. Huxley: That is all.

Recross-examination.

By Mr. Allyn:

Q. You identify the chart, Plaintiff's Exhibit 26, as showing the sales of automatic and non-automatic lighters sold by the Casco Company?

A. Pardon me. I didn't hear you.

Q. You identified this chart, Plaintiff's Exhibit 26, as showing the sales of the automatic and non-automatic Casco lighters?

A. Yes.

Q. Is that right?

A. Yes.

Q. Does that include the type of lighter that I show

you now?

A. No, this is a manually-operated lighter, to the best of my knowledge. May I see it again? (The witness examined an object.) No. I would have to get my glasses. (The witness put on a pair of glasses.) I would say that this is a manually-operated lighter.

[fol. 118] Q. Yes. I say to you that you sold lighters just like that. Didn't you?

A. Yes, to the Ford Motor Car Company. It happens to be one of their lighters.

Q. The so-called Ford type?

A. This here is designed by the car manufacturer (indicating).

Q. That is a plug exactly like those made by you?

A. I would say so.

Q. And still made by you?

A. Yes.

Q. And still supplied for replacements on Ford cars?

A. Well, may I state this? That Henry Ford is now making sixty-five per cent of this himself? Cuno and ourselves share the rest of the business, whatever that is, and it is down to a point where if we made, oh, 75,000 this year I think we will make a lot, whereas we used to make five or six hundred thousand of these and share a million lighters between us.

Q. Is that included in the chart?

A. No, not in the automatic chart. Let me see that chart. Here is the non-automatic lighter and this would be included in the non-automatic columns and not included in the automatic columns.

By Mr. Huxley:

Q. In other words, they are in the blue column but not in the red?

A. There is the story and it is more clear than I can answer.

Mr. Allyn: Merely identification to know whether they included this type of lighter in the report.

Mr. Byrne: Yes. Is that all?

Mr. Allyn: That is all.

I should have offered that in evidence. This is Defendant's Exhibit G.

(Defendant's Exhibit G: Cigar lighter plug.)

[fol. 119] Mr. Huxley: Mr. Cuno, will you be sworn?

CHARLES H. Cuno, called as a witness on behalf of the plaintiff, being first duly sworn by Clerk Carroll, testified as follows:

Mr. Huxley: I am calling Mr. Cuno as an adverse witness.

Direct examination.

By Mr. Huxley:

Q. Will you state your name, please?

A. Charles H. Cuno, c-u-n-o.

Q. Are you the President of the defendant company here!

A. I am.

Q. How long have you been such President?

A. Since the death of my father in 1923.

Q. 1923. Where do you live?

A. Meriden, Connecticut.

Q. Mr. Cuno, is it substantially correct that in the year 1935, the sales by the Cuno Company from 1934 to 1935 increased from about 60,000 to about 855,000? Is that substantially correct?

A. I couldn't answer that question. I don't know.

Q. You don't know. You have no information about it!

A. No, not with me.

Q. Is anyone here who does know?

A. I don't know whether we have a record of that here or not.

Q. You can obtain it by tomorrow morning, can you not!

A. Possibly. I will try, if you wish it.

Q. This evidence was introduced. The figures were given in some other litigation, were they not?

A. I will try to produce it.

Q. Will you get the same figures and have there here tomorrow morning, please?

A. Yes.

[fol. 120] Mr. Huxley: That is all.

Unless counsel care to stipulate it.

I want to find out the figures of the sales by the Casco Company.

The Witness: Cuno.

Mr. Huxley: By the Cuno Company, for these different years, from 1934 to 1938.

The Witness: You didn't state which type of lighter.

Mr. Huxley: Non-automatic.

The Witness: All non-automatic lighters.

Mr. Huxley: All non-automatic.

The Witness: All non-automatic lighters.

Mr. Huxley: Yes, all non-automatic cigar lighters.

The Witness: There are many types.

Mr. Huxley: Yes, any type of non-automatic.

The Court: Open face, or inverted face, or everything?

Mr. Huxley: Everything.

The Witness: Oh, I don't know. I am just asking that as a matter of information.

Mr. Allyn: This is the chart before the Court now.

The Witness: I didn't know you had that.

Mr. Huxley: All types.

Mr. Allyn: No, it applies only to these two types.

Mr. Huxley: I think in a few moments counsel and ourselves can get this matter straightened out and stipulated in the morning.

The Court: All right.

The Witness: Is that all, sir?

By Mr. Huxley:

Q. No, I would like to ask you one more question. The cigar lighter of the automatic type that you are now mar-[fol. 121] keting is this one represented by Plaintiff's Exhibit 2, is it not?

A. Substantially, yes.

Q. And that was marketed in 1939?

A. I believe so.

Q. Prior to that, did you offer to the trade any other type of automatic cigar lighter?

A. Not to my knowledge.

Q. Did you ever see this Ashton patent No. 2,084,966 that I am handing you now?

A. Yes.

- Q. In that there is a construction in which there is a thermostatic element which is wrapped around by a coil. Did you ever offer any such type of cigar lighter as that to the trade?
 - A. I don't know as we did.
 - Q. You don't know?

A. No.

Q. Your answer is you don't know.

A. That is right.

Q. All right. That is all. You own this patent, do you not, the Cuno Company?

A. That I cannot tell you, either.

Q. That you do not know. All right. Have you any reason to doubt the correctness of what it states on the face, "Assignor to the Cuno"?

A. Then we own it.

Mr. Huxley: All right, we have got that far. That is marked for identification. It is Plaintiff's Exhibit 27. That is all.

The Court: 27 for identification.

(Plaintiff's Exhibit 27 for Identification: Copy of Ashton patent No. 2,084,966.)

Mr. Huxley: The figures we will get together tomorrow

morning. Aside from that, the p-aintiff rests.

Mr. Allyn: I offer, if your Honor please, these four sheets, which I understand are stipulated by counsel for the plaintiff as being loose-leaf catalog sheets, being circulated to jobbers on request in the United States, showing different [fol. 122] types of cigar lighters offered by the plaintiff to the trade during the current year.

Mr. Byrne: Each catalog page carries its own date of

print.

Mr. Allyn: Let them be offered as one single exhibit.

(Defendant's Exhibit H: Four sheets, loose-leaf catalog sheets.)

Mr. Byrne: Plaintiff desires to make clear that these pages comprised in the last exhibit are not issued as a catalog. They are sheets that are supplied to jobbers on request.

Mr. Allyn: I am not sure whether my brother offered the stipulation which we had in regard to the use of so-

called soft copies of patents.

Mr. Byrne: I did. I stated at the time the feature we were concerned with then, other features pertaining to the defendant that applied, and asked that the stipulation be

copied in the record, which was done.

Mr. Allyn: If your Honor please, I would like to offer in evidence the file wrapper of the patents in suit, for the purpose of showing the estoppel running against the plaintiff with respect to the interpretation of the claims which they have endeavored to place upon us. The file wrapper of the Mead patent 1,736,544.

The Court: You had better mark them separately.

(Defendant's Exhibit I: File wrapper of Mead patent 1,736,544.)

(Defendant's Exhibit J: File wrapper of Cohen patent

2,140,311, known as the No. 1 Cohen.)

(Defendant's Exhibit K: File wrapper of the No. 2 Cohen patent, No. 2,117,232.)

[fol. 123] Clerk Carroll: That is three of them, three file

wrappers.

Mr. Allyn: That is right. I offer a book of patents illustrating the state of the art, including for your Honor's convenience copies of the patents in suit, also. And I have the two sets of patents. As your Honor once suggested, you want one to mark up, and the other for purpose of record. Either one of these may be marked. It makes no difference which one is offered.

Mr. Huxley: I will have to object to this extent, if the Court please. Some of the patents are pleaded. I do not know what patents there are there. We have not got any recent information as to just what is in this book. I do not know whether they are supposed to be applied to the Mead patent or which Cohen patent. There is a mass of material there, some of which is obviously too late, and some of which is not pleaded. So I am afraid we will have to go down each patent and say whether it is offered to show the state of the art, and if so, as to what patent, and whether it is an anticipation and pleaded in the answer. Have you a list of the patents there?

Mr. Allyn: I am sorry I have not. I have given Brother Byrne here some extra copies of ones that were not pleaded, and which are not introduced, however, for the purpose of anticipation, but for the purpose of showing the state of

the art.

The Court: The entire offer is restricted to merely prior art patents.

Mr. Huxley: Prior art patents, but now there are certain patents there. For instance, I presume the Copeland patent is there.

Mr. Allyn: The Copeland patent is offered for anticipation.

[fol. 124] Mr. Huxley: Not as a patent. If so, I object to it. But simply to show prior knowledge and invention as of the filing date of the application.

Mr. Allyn: That is correct.

Mr. Huxley: That is correct. Now are there any other patents there that may be prior to the Cohen patent, but are not prior to the Mead patent, for instance? In the pleadings, unfortunately the patents were not set up against any particular patents in suit, but just a mass of patents.

Mr. Allyn: The Morris patent anticipates claim 11 specifi-

cally of the Mead patent.

The Court: It is always my aim when the patents are brought on for discussion individually, to get specific information of just what they recite. If I overlook it, I will appreciate it if opposing counsel bring it up.

Mr. Huxley: Suppose we do it that way.

The Court: I think the simplest way is to let it be marked as a full exhibit with complete liberty to strike reserved.

Mr. Huxley: Precisely.

Mr. Allyn: All right.

Mr. Byrne: May we have the original one marked?

The Court: Could you mark one, Mr. Carroll, Exhibit
L?

(Defendant's Exhibit L: Book of patents.)

Mr. Allyn: The exhibits offered for identification I would like to offer in evidence, the ones that have been offered for identification.

The Court: There is not anything more to identify them, is there? I guess we had better deal with those one at a time.

[fol. 125] Charles H. Cuno, called as a witness on behalf of the defendant, having been previously duly sworn, testified as follows:

Mr. Allyn: Mr. Cuno has already been sworn. He is now being called as a witness for the defendant.

Direct examination,

By Mr. Allyn:

Q. Mr. Cuno, you at one time met Mr. Mead, who was the patentee of the Mead patent in suit?

A. I did.

Q. And you had a conversation with him in respect to his device?

A. I did.

Q. Do you recall what he said as to the success or failure of his type of lighter?

Mr. Byrne: If your Honor please, I object to that as calling for hearsay.

The Court: Sustained.

Mr. Allyn: If your Honor please, Mr. Mead testified in the Chicago case, and we have stipulated that the testimony which he gave in the Chicago case could be used as evidence taken in this case. So we have in the record certain statements by Mr. Mead which he has made in this case. It seems to me pertinent that this witness should testify as to what Mr. Mead said to him.

Mr. Huxley: That is the most gross hearsay.

Mr. Allyn: How is it hearsay for Mr. Mead to come into court to testify?

The Court: You mean you are offering this witness to contradict the testimony of another witness?

Mr. Allyn: That is right.

[fol. 126] Mr. Huxley: The testimony as given in Chicago by Mr. Mead has been stipulated in this case with the same force and effect as if Mr. Mead came to testify. Now, as I understand counsel, he wants to take some hearsay statement that Mr. Mead might have made, to contradict Mr. Mead's testimony.

The Court: Under your stipulation the situation is just

as though Mr. Mead had testified here.

Mr. Huxley: Had testified here by that testimony.
The Court: He was called by the plaintiff, I suppose.

Mr. Huxley: By the plaintiff, yes, sir.

The Court: If a witness, Mead, called by the plaintiff, testified to a certain fact, why isn't the defendant entitled to put on a witness to testify that Mead, the plaintiff's witness, has made a contrary statement off the stand?

Mr. Huxley: Because I think that whatever Mr. Mead wants to be cross examined about, he could be examined about by calling Mr. Mead if they wanted him, for any further examination. But some vague statement that this witness may have incorrectly remembered as to what Mr. Mead told him, it seems to me, is pure hearsay as bearing

on an issue, as proving a fact by something that Mr. Mead

might have said.

The Court: I quite agree it is not admissible as direct evidence to prove the truth of what this witness says, but I will rule that it is admissible in contradiction of Mead, if indeed it has that effect, in view of the stipulation which makes Mead an earlier witness in this case.

Mr. Allyn: There were other witnesses, also, who testified

in that case which are coupled up in this stipulation.

[fol. 127] The Court: I will receive the testimony for the limited purpose stated.

(The reporter read as follows:)

"Q. Do you recall what he said as to the success or failure of his type of lighter?"

A. Yes. He stated to me that after considerable experimenting they finally made a sample which was delivered to Mr. Fisher, who at that time was President of the Cadillac Motor Car Company. He had that on his desk for several weeks, hooked up to a battery, and was quite excited about it at first, but after it failed to operate consistently be finally dropped the idea of putting them on as standard equipment on Cadillac cars. Sometime after that a jobbing model was brought out, which was sometime in 1928, a number of which were sold to the Montgomery Ward Company. And he told me that he was very much disappointed and disgusted by the fact that practically all of them came back after having been used a few times. The setting of the thermostat was evidently too delicate for ordinary operation, due to difference of temperature of atmospheric conditions. In summer-time, why, the temperature got up to a hundred and in the winter-time 22 degrees below zero, and his device did not work satisfactorily under all those conditions. In fact, he told me that he was so badly disappointed in the operation of the lighter that he finally quit his job with the company.

By Mr. Allyn:

Q. Mr. Cuno, will you look at this Defendant's Exhibit G and state if you know what that is.

A. That is one of the types of cigar lighters, the plug part of it, which we sell to the Ford Motor Company.

[fol. 128] Q. And you had at one time as mentioned by the plaintiff a license agreement with the Casco Products Corporation, did you not?

A. We did.

Q. Do you know whether or not they made any devices under that license?

A. We understand they did, because they at one time were supposed to receive about half of the Ford business and we the other half. And naturally the Ford Company wanted all lighters made exactly alike, so that all parts would be interchangeable.

Q. I will show you another device and ask if you know

what that is.

A. This is a manual type of lighter similar, or possibly one of the types sold to the Ford Motor Company, of the so-called Ashton design.

Q. And the socket is what?

A. The socket is so made that it can be fastened to the instrument board by simply pushing it into the instrument board, putting in a steel plug to expand the three lugs, and then it is held in without the use of any additional brackets or nuts.

Q. That particular socket was made by your company,

was it not?

A. Yes. It has our name on the bottom.

The Court: May I suggest that the record make it plain whether that is the Ashton patent that the plaintiff put in evidence? He says it is a so-called Ashton design.

Mr. Allyn: That is true, if your Honor please. The Ash-

ton patent.

Mr. Huxley: We had one marked for identification. I think it is a different patent.

Mr. Allyn: Ashton patent 2,060,783. It is a different one from the one my brother marked.

The Court: That is what I wanted to get straight.

Mr. Allyn: It is 2,060,783, which is in our book of exhibits.

[fol. 129] By Mr. Allyn:

Q. That was the Ashton patent to which you referred just now?

A. Yes.

Mr. Allyn: I offer that socket and plug as a defendant's exhibit.

Mr. Byrne: I object to that as immaterial to any issue that would be involved here.

The Court: What is the purpose of it?

Mr. Allyn: I want to show the Court what the defendant and plaintiff were talking about, of a non-automatic, that they were making all these years, and which they are now making. And it is a part of the current sales. It is one of the devices illustrated in the—

The Court: Chart?

Mr. Allyn: —catalogue sheets of the plaintiff, and it is sold by both parties.

The Court: What of it? How is that material on the

suit dealing with an automatic structure?

Mr. Allyn: My friends put in evidence here the total of sales showing how the sales went up and sales went down, and they included automatic and they included non-automatic.

The Court: I do not see that the detail of the construction entering into the non-automatic is material.

Mr. Allyn: No, it is not. That is true. Mr. Byrne: Then it ought to be out.

Mr. Allyn: It is merely explanatory of what they mean when they are talking about the non-automatic.

The Court: It does not seem to me that that is in issue. [fol. 130] Mr. Allyn: No, it is not in issue. It is purely explanatory.

Mr. Byrne: Then I submit, if your Honor please, it is

immaterial and should be excluded.

Mr. Allyn: That particular patent shows what was being done under the license agreement that my friend referred to. He brought that up. I do not know just what his implications are.

Mr. Byrne: The sole implication—and it is not an implica-

The Court (Interrupting): I do not think it is admissible in that respect. I am wondering if I have already let in the Ashton patent.

Mr. Byrne: It is only marked for identification.

The Court: No, the patents were marked.

Mr. Byrne: Oh.

The Court: I wonder if it is improper to have a commerical structure that goes with them. I am inclined to think it is. I will sustain the objection.

Mr. Allyn: I do not think it is particularly important, if your Honor please. In connection with these file wrappers we wanted the Court to know what was cited.

The Court: I think I ought to read the file wrappers with the patents, and not with the commercial structure.

Mr. Allyn: Very well.

By Mr. Allyn:

Q. Mr. Cuno, when was it that Mr. Mead had this conversation with you in regard to his lighter?

A. I believe it was early in 1939.

Q. Do you know whether it was before or after the trial of the case of the plaintiff's against Sinko Tool & [fol. 131] Manufacturing Company?

A. It seems to me it was after the evidence. After he

was called as a witness at that trial.

Mr. Allyn: That is all. Just a minute.

Cross-examination.

By Mr. Byrne:

Q. Mr. Cuno, where was this talk about you held, that you had with Mr. Mead?

A. In the office of the Bowen Products Company of

Detroit, Michigan.

Q. And Mr. Mead is employed there, is he not?

A. Yes.

Q. And has been for a long period of time, has he not?

A. I don't know how long.

- Q. You don't know how long. You know he is a man of a good deal of standing with that company, do you not?
 - A. I would assume so.

Q. Did you make a special trip there to see Mr. Mead?

A. I did, from Detroit.

Q. You did from Detroit. At that time you received from Mr. Mead one of these devices which was made by the Jessop Company or someone else, did you not?

A. No, I did not.

- Q. You had one in the possession of your company before the trial of the Sinko case?
- A. That was one that Mr. Mead handed to our Mr. Wolfson. Mr. Wolfson saw Mead long before I did.

- Q. So Mr. Wolfson of your company, and you, personally, have had interviews with Mr. Mead about the matter?
 - A. That is right.
- Q. Did any of your salesmen or any of your officials pick up on the market one of these devices which were put out about 1929 or thereabouts?
 - A. I don't know.
 - Q. Or earlier?
 - A. I don't know.
- Q. Didn't have any brought to your attention at that time?
 - A. It is so long ago, I can't remember.
- [fol. 132] Q. Yes, I see. But you have a historical exhibit or morgue, as same are wont to call it, for devices that are on the market, do you not?
 - A. Quite a large one.
- Q. Did you ever look there for one of these old Mead devices?
 - A. No, I do not believe I did.
- Q. When this device came to you through your associate, Mr. Wolfson, did you test that device at that time?
 - A. Not personally.
 - Q. You did not. Well, it was tested, wasn't it?
 - A. I believe so.
 - Q. Was a report made to you about that test?
 - A. I think a verbal report was made.
 - Q. Yes. And the report was that it worked, was it not?
 - A. It was not satisfactory at all.
- Q. Answer my question, please. It would work to light the coil, would it not?
 - A. I cannot even answer that.
- Q. You cannot even answer that. You cannot answer that. You saw it operate today, did you not?
 - A. No, I did not.
 - Q. You were not here in Court?
 - A. I was sitting over the other side.
- Q. Do you question that Mr. Johnson got a light in the presence of the Court with that?
 - A. I would not question it.
- Q. No. Sure not. You made mention of the fact that Mr. Mead has said that he took one of these devices to a Mr. Fisher of Cadillac, and that Mr. Fisher of Cadillac

said he could not use it for standard equipment. Is that

what you said?

A. I did not say it that way. I said that Mr. Fisher was very much excited about it, and had it put on his desk, hooked up to the battery, and left it there several weeks. And played with it every day, lighting cigars, etc.

Mr. Byrne: Now, if your Honor please, I move to strike out from the direct testimony of the witness all reference [fol. 133] to the purported conversation with Mr. Fisher on the ground that that is unquestionably hearsay, what Mr. Mead said that somebody else had remarked with respect to this lighter.

The Court: I will make the same ruling I made before. It is admissible not to prove the truth of the hearsay statement, but it is admissible only insofar as it has a bearing on Mead's testimony in Chicago, which is now a part

of this record and which I have not yet read.

By Mr. Byrne:

Q. Do you know whether or not the testimony which you are now giving does contradict any testimony which Mr. Mead gave at the Chicago trial?

Mr. Allyn: I object.

The Court: I do not think that is a question for the witness.

By Mr. Byrne:

Q. Mr. Mead was quite willing to talk with you about the matter when you came to him, was he not?

A. Yes, certainly. I do not think he had anything to

conceal.

- Q. Yes. How early did you know that this Mead lighter was carried in the catalogue of one of the Chicago mailorder houses?
- A. That is a difficult question for me to answer. I do not know.
- Q. Is it a matter that came to your attention comparatively recently?

A. Possibly within the last two or three years.

Q. But you were in the cigar-lighter business back in 1927, '28 and '29, along in there, were you not?

A. Yes.

[fol. 134] Q. You did not know about that having been listed in the catalogue of this mail-order house at that time?

A. We do not see all the catalogues. I can simply say this, that it evidently made no effect on the market or we would have known it.

- Q. Of course, you now say your recollection is such that you cannot say that you knew about it back in that early time. Is that it?
 - A. I do not know. I do not recollect it.
- Q. Yes. Well, did you ever see the listings of your own company in the catalogues of the Montgomery Ward & Company?

A. No, I do not watch those things.

Q. I see. Will you be good enough, please, to look at a photostatic copy, which please accept from me as true, which comes from the Montgomery Ward catalogue, and see if we do not list Mead's lighter alongside of the Cuno lighter at the point or place where I indicate.

A. Did you say there is a Mead lighter listed here?

Q. I understood so.

A. I do not see it. Well, that looks so different from the sample submitted in evidence that I would not recognize it.

Q. Well, nevertheless, it is listed right alongside in the next column to a device of your company, the Cuno Company, is it not?

A. It looks as though it might be.

Q. Yes. Can you identify your own device?

A. That looks like one that we made, and also one that Casco made. They were very similar.

Q. Now, in turn we find that comes from Montgomery Ward catalogue, issue of the spring and summer of 1929.

A. Yes.

Mr. Byrne: If my information is correct, I will ask that this photostatic copy of the front page and page 6 of the Montgomery Ward & Company catalogue for spring and summer of 1929 be marked for identification Exhibit 28.

[fol. 135] By Mr. Byrne:

Q. Now, do you know, or did Mr. Mead tell you, when he left his previous employment, where they made this lighter, this automatic lighter exemplified by Exhibit 12 here?

A. He didn't seem to remember exactly. I asked him that particularly.

Q. Yes. Well, did he say to you-

The Court: Present it to the Clerk for marking or we will have confusion. 28 for identification.

(Plaintiff's Exhibit 28 for Identification: Photostatic copy of front page and page 480 of Montgomery Ward & Company catalogue for spring and summer of 1929.)

By Mr. Byrne:

Q. Did he not tell you it had been a matter of a number of years?

A. No, he didn't say.

Q. Did not say?

A. Just did not remember when he left.

Q. Did he remember the name of the company that took over and actually made this Mead type lighter?

A. I do not believe I asked him that.

Q. Didn't ask him that. Did he tell you where it was made, at Detroit or Cleveland or where?

A. He didn't say that, either. He simply said that Mr.

Jessop was interested in the company.

- Q. But he didn't tell you-how long it had been from the time he left the Jessop concern until you talked with him, did he?
 - A. No.

Q. By the way, who accompanied you in your talk with Mr. Mead?

A. Mr. Mead and I were alone most of the time. One of our salesmen took me down there, but he was in another room practically all of the time.

[fol. 136] Q. You wanted to be alone with Mr. Mead?

A. No. The other man just didn't think it was necessary for him to be there.

Mr. Byrne: I think that is all, Mr. Cuno.

Mr. Allyn: Of course, if your Honor please, on that Montgomery Ward catalogue I do not know what the structure was that was being advertised. And I do not know, therefore, how pertinent it may be. I assume it is made to tie up the other evidence.

Mr. Byrne: That is right.

Mr. Allyn: (Continuing.) —that was produced by stipulation to show that Montgomery Ward had an advertisement.

Mr. Byrne: Of the automatic lighter, and it was continued another year beyond, which was covered in the previous

testimony.

Mr. Allyn: It is referred to as an automatic lighter, and alongside of it is a Cuno National Automatic cigar lighter.

Mr. Byrne: Certainly. You do not know your neighbors.

Mr. Allyn: I do not have to.

The Court: Let us make progress. What is the situation?

Mr. Allyn: My friend offered this.

Mr. Huxley: We have not offered it. It is marked for identification.

Mr. Allyn: Well, that is all. Mr. Wolfson.

[fol. 137] S. L. Wolfson, called as a witness on behalf of the defendant, being first duly sworn by Clerk Carroll, testified as follows:

By Clerk Carroll:

Q. What is your full name?

A. S. L. Wolfson.

Direct examination.

By Mr. Allyn:

Q. You are a resident of Meriden, Connecticut?

A. Meriden.

Q. And you are the Chief Engineer of The Cuno Engineering Corporation?

A. I am.

Q. For how long have you been employed by The Cupo Engineering Corporation?

A. Since the latter part of June of 1927.

Q. What kind of training had you previously had prior

to going with The Cuno Corporation?

A. Practical mechanics, and I hold a diploma in electrical and mechanical engineering from The Lowell Institute School of the Massachusetts Institute of Technology, and a number of years' experience as experimental mechanic.

draftsman, designer, and engineer in general for various concerns.

Q. You are familiar with the cigar lighters made and sold by the defendant, I presume.

A. I am, quite.

Q. Now, do you know how many years they have been making cigar lighters?

A. I know from my own knowledge that they have made them ever since I have been there and had been making them for a number of years prior to my coming. I believe it was somewhere in 1917 or 1918 that they started making cigar lighters; perhaps earlier than that.

Q. I will ask you to identify this device (handing an

[fol. 138] object to the witness).

A. That is a partially cut-away model of our current thermostatic lighter—partially cut-away model.

Q. So as to show the interior construction of the vari-

ous pieces?

A. As to show the working of the various parts. It is a commercial lighter cut-away to show the workings of the various parts.

Q. You listened to the testimony of Mr. Johnson in re-

gard to the Cuno automatic lighter this morning?

A. I did.

Q. You heard the description of the various operations?

A. I did.

Q. You are familiar with the use of this device, are you not?

A. I am.

Q. When Mr. Johnson testified he said that the igniter sometimes touched the abutments in the bottom of the socket and that sometimes it did not. What have you to say as to that?

A. Up until the time Mr. Johnson had spoken, I never questioned the fact that the igniter rested on the abutments. That is what it is put there for. In fact, in manufacture we endeavor to arrange the groove into which the detent finger presses so that there is a slight clearance when the igniter rests against the abutments at the bottom of the socket.

In other words, you can move that slightly before the detent finger hits the back edge of the groove. I believe that was Mr. Johnson's explanation of why it was possible that according to the state of the state of

sible that sometimes it did not touch it.

Q. Now, you may examine Plaintiff's Exhibit 2, which

shows one of the Cuno lighters not cut-away.

A. Well, you will notice there just what I stated—that you could move that back slightly before the detent finger engages the shoulder. Therefore, no action of the detent finger would prevent the heating unit cup seating on the bottom of the contact—drawn contact.

[fol. 139] Q. This is identical in every substantial partic-

ular with the cut-away sample that I have, is it not?

A. Within the commercial manufacturing tolerances, yes.

Mr. Allyn: This cut-away sample I want to offer in evidence.

(Defendant's Exhibit M: Cut-away sample.)

Q. What is the purpose of that spring detent on the side of the socket of Plaintiff's Exhibit 2, the Cuno auto-

matic lighter?

- A. The purpose of the detent is to prevent an outward movement of the otherwise stationary part of the plug under the influence of the momentum of your knob when the unit releases. In other words, when this thing releases you have a mass that is moving out with a certain velocity under the influence of a spring, and you have another mass which is stationary, acting as a brake for that motion, and you also have the detent action of your finger. The object is to absolutely prevent any possibility of that plug jumping out of the socket.
- Q. In other words, when the parts are in the closed-circuit position, the igniter cup is in contact with abutments at the bottom of the socket, and the sliding contact of the sleeve—the inside sleeve—is in engagement with the thermostatic fingers, is that correct?

A. That is right.

Q. When the thermostat bends the contact sleeve slides out, but the igniter and its holder remain stationary?

A. Correct.

Q. Because of this detent?

A. Correct.

Q. Now, what have you to say as to whether or not the thermostatic fingers of the Cuno lighter are or are not heated by direct conduction from the igniter unit?

A. If there is any conduction it must be very, very indirect, because there is no short path at all from the igni-

ter unit to the thermostatic arms.

[fol. 140] Q. The thermostatic arm does not engage the igniter unit?

A. No, nor any part directly connected with it or in-

directly.

Q. It engages only the sliding contact sleeve, is that right?

A. That is correct.

The Court: May I see that last exhibit?

(An object was handed to the Court.)

Mr. Allyn: For the purpose of the record, because my friend has referred to the reference numbers, this Plaintiff's Exhibit 21 is an enlarged drawing, showing the Cuno automatic cigar lighter.

Q. Now, in this exhibit there is shown the various parts. Do you know what the relative mass is of the stationary and movable parts of the plug and this lighter, disregarding the knob? I mean the mass of relative weight of the igniter head 28, the post 25, the metal cup 24, and the insulating body 18, on the one hand, which remain stationary at all times, and the sliding member 35 and its rear end and the attached spindle 21?

A. The mass of the stationary parts exceeds the mass of the moving parts many times, perhaps as much as five or six to one. I am not certain as to the figures, but I know

that it is considerable.

Q. In other words, the part that moves is-

A. Light in weight.

Q. Is relatively light in weight?

A. Correct.

By Mr. Huxley:

Q. Was the knob disregarded?

A. The knob was disregarded. That may vary from one model to another.

By Mr. Allyn:

Q. The knob is a part of the device which is designed to suit the particular customer?

A. It is specified by them usually.

[fol. 141] Q. Now, in the device of the second Cohen patent all of the parts of the plug, as I understand it from Mr.

Johnson's testimony, move when the thermostatic latch releases the igniter head, with the exception of this little thin metal sleeve 38?

A. That was my understanding.

Q. In other words, the sleeve 38 is supposed to stand still and all the rest of the plug moves?

A. That is as I understand it, yes.

Q. Now, in the commercial sample of The Casco Company, as typified by their exhibit 19, if we disregard the knob on this plug of exhibit 19, what have you to say as to the relative weight of the stationary and moving parts when the device is released by the thermostat?

A. Since the only part that does not move is this light shell which encloses the spring, I think it is quite obvious that by far the greater part of the mass is moving when the lighter lets go. It might be either three times the mass or it might be four; considerably greater, anyway. The part that does not move is insignificant as compared with the rest.

Q. Will you state to the Court what that relative mass has to do with the operation of this lighter?

A. Well, my observation has been that the operating force—the spring is about the same in both lighters. That force acts through about the same distance. moves through about the same distance. The break in both lighters is approximately the same, and you have a certain mass moving under a certain spring force in both cases. In one case you have a large mass and in the other case you have a small mass. The momentum of that large mass moving under the force of the spring will be greater than that of the small mass, and conversely, you have as an anchorage in one case a large stationary mass, which tends to oppose the moving mass, and in the other case you have a small mass which opposes the movement of the other mass. Now, even though the product of the force acting [fol. 142] and the mass moving was the same—the momentum was the same in both cases-in the Casco lighter vol have very little braking action. You have a light part hanging on to the end of it, whereas in the Cuno lighter you have a rather heavy part to stop that action, disregarding entirely any detent fingers.

Have I made myself clear, your Honor?

The Court (to the witness): I understand your observation. I am not quite sure that I see its significance. That is to say, I don't feel sure that I see any bearing on the issues in this case.

By Mr. Allyn:

- Q. In the Cohen patent No. 2—you have read it, have you not?
 - A. I have.
- Q. Did you find in it any suggestion as to the necessity of stopping this mass when impelled by the spring?

A. I don't recollect that there was any indication of any

means for stopping it.

Q. How important is it to stop that mass when the spring has been released?

A. Well, if there is no force acting to stop the mass, it

will continue in the line of motion.

- Q. In other words, the plug will jump out of the socket?
- A. There will be nothing to stop it.
- Q. In the defendant's design there is a definite latch to stop the movement of the plug and hold it definitely in a fixed position at all times?

A. Not only is there a detent, but there is the stationary mass which acts as an anchor—the part that is not moving.

Q. The only part that does move in the opening of the circuit in the Cuno automatic is the sliding sleeve on the inside of the body, is that right?

A. With whatever is attached to it.

[fol. 143] Q. Knob or push-button or whatever it is?

A. With whatever is attached to it in the way of a knob.

Q. Now, the problem of thermostatic metal required in these lighters has been discussed to a certain extent by Mr. Johnson. Do you know to what extent the character or type of the thermostatic metal is important in connection with the design and manufacture of these devices?

A. It is quite important that it be suited to the service for which it is intended. It has to be suited for the temperature, in the first place, to which it will be exposed and for the range through which it will have to operate.

Q. What kind of bimetallic thermostatic metals are there?

A. The manufacturers generally class it as low heat, medium heat and high heat. That heat indicates the range of the temperature to which it is apt to be exposed and under which it will have to operate.

Q. Now, if in the so-called Mead type lighter a high temperature metal was employed in the thermostatic member—it is number 54 in the patent—

The Court: I have it in mind.

By Mr. Allyn:

Q. (Continuing.) What would be the effect under normal operating conditions?

A. Just where is that located?

Mr. Byrne: I have been listening to this attentively, but I can't find that it has any bearing or is in any wise material. I object to it unless my friend can show some materiality. It seems to me that we ought not to go far afield on this matter.

Mr. Allyn: It is my contention that there is insufficient disclosure to enable one to build an operative lighter in any of these patents. All three of them are wholly defective [fol. 144] in that respect. There is nothing to indicate that any of the alleged inventors had the remotest concept of this difficulty of the difference between high and low temperature of bimetal. If one is used it might work. If the other is used it won't work, and that it has been found can only be tested out by experiment.

The rule is that where experiments are required in order to produce an operative device, the patent is defective—fatally defective—for failure to disclose and to do away with the necessity of experimentation. Here it has been perfectly plain from Mr. Johnson's testimony and Mr. Cohen's testimony that they experimented for years before they got a satisfactory device. I think that that is pertinent.

The Court: Unless Mr. Byrne has a good answer, I am inclined to think that the question is admissible for what it is worth. I suggest that we defer the answer until tomorrow morning.

We will suspend until 9:30 tomorrow morning.

(At 6 o'clock a recess was taken until Friday, November 3, 1939, at 9:30 o'clock A. M.)

November 3, 1939, 9:30 A. M.

(The trial was resumed.)

Mr. Huxley: If the Court please, yesterday I was examining Mr. Cuno about some figures of sales, and I am very glad to say that counsel for defendant has very kindly supplied us with the figures. These figures which represent [fol. 145] the 2600 and 1700 series combined of the defendant company, as I understand it, represent the bulk of the sales from the years 1934 to 1938 inclusive, of the non-automatic wireless lighters sold by the defendant, the bulk of the sales.

Mr. Allyn: That is correct.

Mr. Huxley: In excess of 90%, anyway. The figures are as follows: for the year 1934, 330,000. For the year 1935, 880,000. For the year 1936, 920,000. For the year 1937, 775,000. For the year 1938, 220,000.

The Court: Is your memorandum in such form that you

could put it in?

Mr. Huxley: This, as I understand it, is a chart which is taken from another case. We would be very glad to have a duplicate made and introduce it in the form of a chart if it would be more convenient for your Honor. The figures that I have read are the figures represented on this paper.

The Court: I merely suggested it because sometimes it is more convenient for me working on a case to have an exhibit than to have to paw through a large transcript.

Mr. Huxley: Very well. Mr. Allyn: No objection.

Mr. Huxley: We will reproduce this chart then which was Exhibit Q. Was it?

Clerk Pickett: In another case.

Mr. Huxley: In another case. And we will offer that in evidence, that same chart, as Plaintiff's Exhibit 29.

The Court: Why not put it in now and give it a number, and you can substitute for it?

Mr. Huxley: Yes. We will offer that as Plaintiff's Exhibit 29.

[fol. 146] (Plaintiff's Exhibit 29: Copy of chart, Plaintiff's Exhibit Q in another case—copy to be furnished.)

Mr. Huxley: A photostat can be furnished. The Court: Is it necessary to let that copy go?

Mr. Allyn: I took it out of another case.

The Court: Is that case still alive?

Mr. Allvn: Yes.

The Court: Then, we will have to substitute a copy.

Mr. Huxley: Mr. Allyn offers to make a chart showing the same "zures, for your Honor's convenience. We will put it in in chart form.

Mr. Allyn: Mr. Pickett says that he can have that photo-

stated during the day.

The order having been interrupted momentarily by this, I want to say that yesterday Mr. Huxley asked us to stipulate in regard to a former license from Casco to Cuno. To avoid any misconstruction of the situation, I should like to ask that counsel stipulate that Cuno was licensed by Casco under the Morris patent 1,376,154 and others. that not correct?

Mr. Huxley: That is correct.

Mr. Allyn: And you stipulate that?

Mr. Huxley: I so stipulate.

Mr. Allyn: And that Casco was licensed by Cuno under Wolfson 1,980,157 and others?

Mr. Haxley: That is correct.

Mr. Allyn: And that the agreement was cancelled by Cuno in 1938, after the expiration of the Morris patent.

Mr. Huxley: Whatever the date is. November, 1938, I am sure it is. That is correct.

Mr. Allyn: Now, may Mr. Wolfson finish?

The Court: Very well.

[fol. 147] S. L. Wolfson, a witness called on behalf of the defendant, resumed the stand and testified further as follows:

Direct examination (continued).

By Mr. Allyn:

Q. Just a moment, Mr. Wolfson.

Mr. Allyn: A question was asked of Mr. Wolfson before the closing yesterday, and I should like to have that question repeated. Your Honor ruled that it might be answered. (The reporter read as follows):

"Q. Now, if in the so-called Mead type lighter a hightemperature metal was employed in the thermostatic member—it is number 54 in the patent—what would be the effect under normal operating conditions?"

Mr. Byrne: That was objected to, if the Court please. The question is, of course, hypothetical. A patent in the first instance is addressed to the engineers and men skilled in the art. It was for that reason that we objected yesterday, and it seems to me that our good friends on the other side ought to confine themselves within reasonable limits on this copy.

The Court: I think it is admissible. I overrule the ob-

jection.

The Witness: Well, I believe my answer was, Which one? You asked the question regarding a specific part of the Mead lighter, and it was not clear in my mind at that time which particular part it was.

By the Court:

Q. I think the transcript indicated number 54 in the patent.

A. I didn't have the patent before me.

[fol. 148] By Mr. Allyn:

Q. (Mr. Allyn handed a paper to the witness.)

A. If a so-called high heating metal were used in a position as remote from the source of heat as shown in the patent for part 54, the results would be unsatisfactory.

Q. What is your opinion with respect to the practicability of a device of the type of figures 19, 20 and 21 of Mead where the entire thermostatic device is outside of the socket?

A. I shouldn't consider a device so constructed would be satisfactory in operation, at all satisfactory in operation. I shouldn't think it would work.

By the Court:

Q. Those figures show the thermostatic device outside both the plug and the socket?

A. Yes, sir. They show only one thermostat. That is the thermostatic piece 54¹, controlling the latch.

Q. In what figure?

A. Figure 21, showing the thermostatic latch 54¹, controlling the spring detent 53.

Q. Doesn't that figure show that inside the socket?

A. I don't see any other indication of a thermostatic member of any kind.

Q. Isn't the thermostat there inside the socket?

A. Figure 21, I believe, is a section, a partial section of the same device as shown in Figure 20, and in Figure 20 there is absolutely nothing shown inside the socket of the nature of a thermostatic spring or member. In Figure 21, as I see it, the only thing tending to return the socket to its inoperative position is the ordinary coil tension spring 105, entirely outside of the socket.

By Mr. Allyn:

Q. To clarify that, which member do you call the socket

in that particular?

A. The part that receives the igniting unit, and it is numbered 41, I believe, in Figure 26. I cannot see where [fol. 149] that line ends. That line appears to end there at the socket.

Q. In other words, you call the member in which the

plug fits the socket?

A. The member in which the plug fits.

Q. And where is the activating thermostatic element in the device as shown in Figure 15?

A. It is part No. 47 in the base of the socket, directly opposite the heating element, facing the heating element.

Q. What have you to say as to the desirability of having the operating spring directly heated by the igniter!

A. Will you repeat that?

(The last question was read.)

A. Well, it is in a position to receive the greatest amount of heat from the igniter in that way. It is also in that position, in that particular device, if that is what you are referring to, in a position to receive ashes, products of combustion, and would be otherwise adversely affected by the use of the lighter.

By the Court:

Q. I do not understand in Figure 20 where the thermostatic spring 54¹ would appear if it were shown in Fig. 26 which it is not.

A. It is back of the section, and therefore does not appear cross-hatched.

Q. Let me put my question this way. You say Figure 21 is a cross-section on Figure 20.

A. I should say that it was a cross-section on Figure 20.

Q. Taken on what lines on 20?

A. There is no line shown in Figure 20 for that section, but I could draw one in accordance with the appearance of Figure 21 to show where it would have to be taken in order to show as it does, if I may.

[fol. 150] By Mr. Allyn:

Q. Referring now to Exhibit 11.

A. I should say that Figure 21 was a section taken through Figure 20 on a line such as I have indicated by my pencil, and looking toward the dash. Therefore, 54¹ in Figure 21, which is colored in this exhibit, an orange color, would be shown in Figure 20 there, correspondingly colored.

Q. Is the spring 105 in Figure 21 thermostatic or non-thermostatic?

A. As it is represented, it would be a simple coil spring, non-thermostatic. There is no indication that it is anything else on the drawing.

Q. A simple tempered spring?

A. A tempered coil spring.

By the Court:

Q. Where would you conclude that the spring 105 would be shown, if it were attempted to show it in Figure 20?

A. It would appear in here somewhere as a figure, and a cylindrical section line that interrupts some coils of the spring. You see it in perspective there to some extent, because if you are looking at the thing this way the back end of the spring is lower than the front end. Figure 20 is not complete in that respect.

The Court: Very well.

The Witness: There is one thing, though, if I may add, that in Figures 22 and 23 the attachment of that spring to the socket is shown, where it hooks in.

By Mr. Allyn:

Q. What, if any, objections of a serious character do you find to the structure disclosed in that Mead patent?

[fol. 151] A. Its general form is defective as being too bulky. There is no provision whatsoever for preventing the contact pin 75 from short-circuiting on the case if you attempt to withdraw it without first bringing it back to the proper rotated position. It is like a key in a keyhole.

By the Court:

Q. What would it do if it did short-circuit during the instant of withdrawal?

A. If you attempted to withdraw it without bringing it to its proper rotated position, you would short it against the case.

Q. My question was, What harm would that do?

A. You could not withdraw it without breaking through the wall of the case. The case has a key-hole in it. Unless you are in line with that key-hole and slot, you can't withdraw it. If you attempt to withdraw it you simply push it up against the case before you release it from contact with that latch and you get a direct short with the ground inside of the lighter. These lighters all have a metal case.

By Mr. Allyn:

Q. What would be the effect of the ground?

A. It would tend to short-circuit the battery.

Q. Well, what I want to know is, What difference would it make if you did?

A. Well, you would burn the thing out.

Q. You have already mentioned the subject of the actuating spring in the bottom of the socket. What about the pivoting of the socket in the base, so that it rotates?

A. That is held in by a simple rivet, and has a flat bearing against the metal base plate. There is no apparatus there for adjustment. You have a dry bearing, and that [fol. 152] would get out of adjustment. It might stick and corrode, or it might become loose and flop around. It would affect the operation of your lighter. It would affect the timing of your lighter. If the friction were great it would delay the release, because it would add a load to your thermostatic spring seeking to release it. If it were loose it would relieve the load to a certain extent. If it

were too lose it might increase it again, because of overhang there. If it is an overhang apparatus hung on a bearing on one end, it would interfere seriously with the consistent operation of your lighter, even though it was initially correctly adjusted.

Q. Now, I call your attention to the Cuno device Plaintiff's Exhibit 2 and to the Casco device Plaintiff's Exhibit 19, and ask you to compare the type of interlock between the movable parts in these two devices.

Mr. Huxley: I don't see that that is material if the Court please. I object to it on that ground. The question here is one of infringement of the patent—what the plaintiff's actual device is, that is, a comparison along these lines. I don't see that it has any materiality.

The Court: What is the purpose, Mr. Allyn?

Mr. Allyn: Well, I wanted to show, without leading the witness, what the distinction was between the two, to show that they are not equivalents.

The Court: What difference does it make? Isn't the real issue a comparison between the alleged infringing device and the patent?

Mr. Allyn: I will reform my question and ask Mr. Wolfson to compare the inter-engaging portions of the movable elements in Plaintiff's Exhibit 2, the Cuno lighter, with the inter-locking portions of the Cohen patent 2,117,232, known as the No. 2 Cohen patent.

[fol. 153] The Court: No. 2 is the alleged infringing device?

Mr. Allyn: Yes, sir.

A. In the Cuno device, in the normal inoperative position the heating element cup, which corresponds to No. 49 in Figure 2 in the Cohen patent, rests against a stop in the bottom of the socket and does not leave that position during the normal operation of the lighter, nor until the plug is completely removed. On the exhibit shown here there are two distinct positions of the heating unit cup and its associated parts—an inoperative position, in which it is out of engagement with anything in the socket, and an operative position, where it is held between the jaws of the thermostatic latching device at the bottom of the socket in a shallow position.

By Mr. Allyn:

Q. You just now referred to the Cohen patent?

A. The Cohen patent. The Cuno device has no such corresponding positions. There is only one position in the socket in which the heating element and its associated parts, which are all of the plug except the sliding contact and the knob carrier, remains stationary, the knob carrier and the switch member alone moving from operative to inoperative. In the Cohen device the thermostatic latching member must conform to the heating element cup. It is limited in its shape and structure by that cup. In the Cuno device the latching member has no other function, and it and the corresponding thermostatic latch can be made of any desired shape to obtain the best results.

In the Cohen device the latch member necessarily engaging the heating element cup, which is the outermost part of the plug, is limited in longitudinal extension with-[fol. 154] out unduly deepening the socket. In the Cuno device the thermostatic latching member, reaching back to a part remote from the unit plug, may be made of a longer length, more flexible, more desirable in operating character-

istics, without unduly deepening the socket.

By Mr. Allyn:

Q. Please point out what you mean on this Exhibit 23 about that length and location of the thermostatic member.

A. The thermostatic member is in both devices and in a device of this sort held against and fastened to the lower end of the socket tube. If your device engages the unit cup it engages the thing nearest to the bottom of the socket tube unless the socket tube, for purpose of making it longer, is extended down bodily and the unit left hanging in the air.

Now, with the Cuno device, the thermostatic arm reaches back to an intermediate switching member and can be made longer and more flexible, gives you wider range in design,

and better operating characteristics.

Q. What about the shape of the latching portion of the

thermostat member in the Cuno automatic device?

A. It is made to give us the best latching and releasing action without any limitations imposed by the fact that the corresponding latching member has to do something else beside latch. I believe I mentioned that point before.

Q. In the Cohen patent, 2,117,232, has the spring 37 any effect upon the contact between the spring tongue 50 and the socket and the rim 45 on the plug?

A. None whatsoever. 45 on the plug?

Mr. Huxley: This.

The Witness: That is 45. No, none whatsoever. That is frictionally held only by the lanced-out finger 50. And the tension of the spring has no influence whatsoever on it that I can see.

[fol. 155] By Mr. Allyn:

Q. In the Cohen patent 2,140,311—

The Court: The first Cohen?

Mr. Allyn: The first Cohen, yes, sir.

By Mr. Allyn:

Q. (Continuing.) On Page 1, Column 1, line 15 to 30——The Court: I can't hear you.

By Mr. Allyn:

Q. I am sorry. Page 1, Column 1, lines 15 to 30, it is stated: "Heretofore it was proposed to do this by providing parts of the automatic control for the circuit, some on the holding device and some on the igniting unit, with the result that these separable parts had to be made to match each other in each particular cigar lighter for best results, and hence the igniting units and the holding devices, respectively, were not interchangeable with other like igniting units and holding devices.

"According to the present invention, this difficulty is obviated by so arranging the means for automatically controlling the circuit supplying current to the heating element and restoring the circuit to normal open-circuit position, that they are carried entirely by solely one and the same of the two separable parts of the cigar lighter."

Do you find any such construction in the Cuno automatic

lighter, Plaintiff's Exhibit No. 2?

A. No, sir, absolutely not. One part of the circuit controlling device is in the socket. The latch on which it acts is in the plug.

Q. Do you recognize what I now show you?

[fol. 156] A. That is a Cuno automatic lighter which has been provided with an extension of the insulating tube be-

yond the bezel of the socket, and with a switch button for operating the contact closing parts projecting through that at the end of that. The operating parts are standard Cuno automatic lighter parts, with an extension button to provide for its being operated through the longer bakelite piece.

Q. Won't you please show the Court how that operates? A. In this case you merely press the button and the parts latch. When the thermostat heats up and releases, your button snaps out to its previous position. This is a standard Cuno lighter with an extended bakelite sleeve, and the button for operating the sliding switch member.

Mr. Huxley: I think we object to that as immaterial. I do not quite see the materiality of taking a device and modifying it. That is not the accused device here. I do not see any materiality.

Mr. Allyn: It is explanatory of what we regard as certain important distinctions in our device over their device,

over their patents.

Mr. Huxley: Maybe that would be an infringement. Maybe it would not. We do not know. But the issues here

are limited to a particular device.

Mr. Allyn: My friend, I know, is trying to urge—I do not want to put words into his mouth, but he has done so in his brief, I take it—that in the Cuno device we have two positions of the plug in the socket. I contend we have only one position, and that is important in connection with certain of the claims in suit. Now, if we have two positions, that is one thing. If we have only one position, that is quite a different thing. And we have quite thoroughly demonstrated, I think, that in the Cuno device like Exhibit [fol. 157] 23 and in Plaintiff's Exhibit No. 2, we have but one position of our plug. And that the separate sleeve which slides inside to make contact with these fingers does not answer the claims of the patent.

The Court: Why can't you argue that without injecting

the synthetic exhibit?

Mr. Allyn: It is explanatory only. It is only explanatory, to show that the operation is identical with the device that Mr. Wolfson has before him, with the exception of the fact that the body is extended to form a knob outside the socket. And we still have the sleeve. And we can show that the body is interchangeable with the regular parts of the socket, of the plug of the Cuno device.

The Court: After all, is this anything more than an animated model such as you used?

Mr. Allyn: That is exactly what it is.

Mr. Huxley: The animated models are made exactly in accordance with the various patents and the various devices. This is a modification, and I do not see that it has any bearing on the question as to whether the accused device does or does not infringe. I do not see any materiality. We have complained of a certain device that is now before the Court. Now they take another device and modify that, and I do not see that that has any bearing one way or the other. Maybe that infringes, too. But the question is whether the one we have charged infringes.

The Court: I will sustain the objection.

Mr. Allyn: But it seems to me, your Honor, it is just as pertinent as their so-called acting models that they have produced here to explain.

The Court: Those were received, at least, with the under-[fol. 158] standing that they were faithful reproductions of whatever they were intended to represent. This is not a reproduction of anything that is in issue.

Mr. Allyn: I did not understand that they were accurate reproductions. For instance, that device—

The Court: Please let us not go back on the record. My understanding was that they were not perhaps scaled reproductions.

Mr. Huxley: That is our understanding.

The Court: But faithful mechanical representations.

Mr. Allyn: I think this is a faithful representation of the defendant's device, with these modifications Mr. Wolfson has mentioned.

The Court: The modified device is not in issue. You have Exhibit 2 which is concededly a defendant's structure. I do not see any reason for this. I will adhere to my ruling.

Mr. Allyn: Then I will ask leave, I think, your Honor—realizing your Honor's ruling against me on it—that your Honor will receive a drawing of the device just mentioned under Rule 43.

Mr. Huxley: The same objection.

The Court: What is Rule 43!

(Clerk Pickett hands book to the Court.)

Mr. Allyn: Rule 43, as I recall it, provides for the admission of evidence, so to speak, over the objection of the Court.

The Court: What subdivision?

Mr. Huxley: (c).

Mr. Allyn: Yes, the record of excluded evidence is (c), at the bottom of page 56 of our copy. Then it goes on page 57, the middle of the top paragraph.

[fol. 159] The Court: I do not see that it comes under

that at all.

Mr. Allyn: It says, "In actions tried without a jury the same procedure may be followed, except that the court upon request shall take and report the evidence in full ."

The Court: What procedure are you referring to?

Mr. Allyn: Procedure under (c). It says, "In an action tried by a jury, if an objection to a question propounded to a witness is sustained by the court, the examining attorney may make a specific offer of what he expects to prove by the answer of the witness."

The Court: You have made your offer.

By Mr. Allyn:

Q. I show this drawing to the witness and ask him to explain what it is.

Mr. Huxley: Same objection.

The Court: He is entitled to explain what it is.

A. This is a standard Cuno automatic device in all its operative parts, with the exception of the fact that the bakelite tube surrounding the working parts has been lengthened out and provided with an outer wall through which a button projects, and an extension of that button engages the standard knob carrier which is always present on the Cuno device when used with a metal knob.

Mr. Huxley: In view of the answer, I object to it as immaterial and move that the answer be stricken.

[fol. 160] The Court: I will deny the motion.

Mr. Allyn: I would like to offer in evidence that drawing. Mr. Huxley: Same objection,

Mr. Allyn: Explanatory.

The Court: Objection sustained.

Mr. Allyn: I did not understand you.

The Court: Objection sustained.

Mr. Allyn: Then may I ask that that be received?

The Court: You can mark it for identification, of course.

Mr. Allyn: I so request, please, that it be marked for identification, it having been identified.

(Defendant's Exhibit N for Identification: Drawing of Cuno automatic cigar lighter modified.)

By Mr. Allyn:

- Q. When the device of the plaintiff's, Exhibit 2, the Cuno lighter, is operated is any sound made when the release occurs?
 - A. There is a distinct click.
 - Q. Is that intentional or not?
- A. That is inherent in any device where two relative moving parts come together.
 - Q. Would that be the case in the Mead device?
 - A. It would.
- Q. Now, yesterday Mr. Cohen stated that his company, as I recall it, has spent something like \$500,000 for equipment for their automatic lighter. Do you know approximately what the tools and equipment required by the Cuno Corporation cost?
 - A. I would estimate not more than \$12,000.
- Q. What type of equipment do you use for the production of your automatic lighter?
- A. We are using the same machine tool equipment we had [fol. 161] for producing the manual type lighters. The expense incurred was largely for new dies, bakelite molds, and things of that sort.
- Q. The sales of the Cuno Company in 1938 in non-automatic lighters decreased materially. Do you know any particular reason for that decrease in the sales of the Cuno non-automatic?
- A. In the first place, 1938 was not a so-called good year. In the second place, I believe that it was in 1938 that the Ford Motor Car Company, one of our largest customers, started to make a part of their own lighters.
- Q. And part of the supply was made also by The Casco Company for the Ford Motor Car Company, as testified by Mr. Cohen vesterday?
- A. The information given us by the Ford Motor Car Conpany was that they proposed to make fifty per cent of the lighters and divide the other fifty per cent between Casco and ourselves.

Mr. Allyn: If your Honor please, I should like to have Mr. Wolfson explain certain features of some of the patents that are included in our exhibit of the prior art. This copy is the official exhibit and this is the other set.

The Court: I think I have one set.

Mr. Allyn: I don't think you could have one set of them. I think these are the only two.

The Court: I have one. Go ahead.

Mr. Allyn: I hope it is the same as this one. The Court: It starts with Hammarstrom.

Mr. Allyn: That is the first, yes, sir. I did not know we bad so many copies of them.

By Mr. Allyn:

Q. Mr. Wolfson, I wish you would look at the Hammarstrom patent 493,380 and state briefly—

[fol. 162] The Court: Just a minute before you frame your question. Will you state against what you are citing this reference?

Mr. Allyn: This reference is cited to show a thermostatic latch member having two oppositely disposed arms, which balance the pressure against an intermediate switch member.

The Court: Against which patents and claims in suit are

you citing?

Mr. Allyn: This applies particularly to claim 3 of the Cohen No. 1 patent, which requires that the thermal responsive means be in co-axial alignment with the plug.

Mr. Huxley: Is this in anticipation?

Mr. Allyn: The state of the art. The Court: Very well. Go ahead.

Mr. Allyn: And other claims where that particular feature is involved.

The Court: All right.

Mr. Allyn: May I ask my question now, sir?

The Court: Yes, go ahead.

By Mr. Allyn:

Q. State what the element I is in that Hammarstrom patent.

A. The element I appears to be a part of a circular-shaped thermostatic member. It is supported along one part of

the circle, the other side being open, permitting latching ends which engage the element J.

Q. Do you find any similar element in the Cohen No. 1

patent?

A. Well-

Mr. Huxley: I think that that is calling for a conclusion. If he will state what there is in the Cohen patent, we will have no objection to it, but that isn't very definite.

[fol. 163] The Court: He says "Do you find?" I tak it the question was equivalent to an inquiry as to the witness"

opinion.

Q. It would appear to me that the member 32¹ or 34¹ with the member 65¹—The hole is generally circular-shaped. The thermostatic member or member with arcuate arms corresponds to that element I in the patent.

The Court: I wish, Mr. Allyn, that when you have the witness refer to a reference you would let him use the pointer. It is hard for me to pick these numbers out of the firmament, as it were.

By Mr. Allyn:

Q. Now, as to the Harley patent 852,326.

The Court: Are you through with Hammarstrom?

Mr. Allyn: Yes, sir.

The Court: Did opposing counsel want to cross-examine on Hammar. trom?

Intermediate cross-examination.

By Mr. Huxley:

Q. Which is the thermostatic element in the Hammar-

strom patent?

A. Looking at the drawing, in accordance with drafting convention, I would say it was the element marked with the letter "I."

Q. The letter I?

A. Yes.

Q. You think that that shows an operative disclosure?

A. I think it would make an excellent thermostatic mouse-trap.

Q. An excellent what?

9-37

A. Thermostatic mousetrap.

[fol. 164] Q. Do you think that would operate all right in the way it is supposed to operate in opening and closing the circuit?

A. I think it would operate to open the circuit, and I believe that is all it is intended to do.

O. You think it would operate all right?

A. If sufficient current were supplied to it, I believe it would.

Q. Is there any description in the patent as to the character of the thermostatic element I?

A. I have no recollection of having seen any except in lines 87 to 92 in the right-hand column.

By the Court:

Q. What page?

A. Page 1 of the patent, your Honor.

Q. Go ahead.

A. "The inner ring of the completed, welded ring being composed of metal which has greater expanding power under heat than the outer one, consequently causes the two ends to be forced out laterally with the result above stated."

By Mr. Huxley:

Q. You think that that would disclose enough to any one familiar with these things to enable him to make an operative structure?

A. The further details would be indicated by the nature of the use to which it is to be put. Here it says, a strong electric current—line 73 of the same page.

Q. Suppose there was a strong electric current. In what shape would the member "I" be made if it was a strong

electric current?

A. It would have to be made so as to have the proper electrical resistance or conductivity not to be destroyed by that current and the proper relative expansion between the two parts of the thermostatic metal, so as to open.

[fol. 165] Q. Suppose it was a weak electric current, then

what?

A. It would not operate.

Q. Suppose you had a weak current?

A. If you had a weak current and wanted to operate it you would have to make the element itself of a sufficiently

high electrical resistance so that the weak current would heat it sufficiently to cause it to act, and you would want to make it of a relatively high expansion between the low and high extension side, so it would act quickly under a low heat.

Q. You think that an ordinary engineer would be able to work that out all right to take care of strong current and weak current?

A. I think the conditions of service would indicate to him what the thing would have to do.

By the Court:

Q. Does this amount to anything more than this? If it were a low current the ring that is part I would have to be of high-temperature metal, and if it were a strong current the lower temperature would suffice?

A. That, your Honor, is one of the variations possible in thermostatic metals. There are high and low temperatures.

Q. Isn't that the substance of the testimony you have just given?

A. I also mentioned resistance—the electrical resistance, which is another important factor.

The Court: I see.

Mr. Huxley: That is all.

Direct examination (continued).

By Mr. Allyn:

Q. In the Harley patent 852,326-

Mr. Huxley: May we ask what this patent is for? [fol. 166] Mr. Allyn: This patent was cited against Mead's.

The Court: What claims?

Mr. Allyn: It was cited against Mead's original claim 5, which is not in suit but which shows what the Patent Office had before it when it acted on the Mead patent.

Mr. Huxley: Is this to show the state of the art?

Mr. Allyn: Right, showing an automatic thermostatically-opened circuit in one form of electric heater.

Mr. Huxley: And pertinent to the Mead patent in your judgment, is that correct?

Mr. Allyn: Pertinent to the principle of the disclosure of Mead.

The Court: Very well.

By Mr. Allyn:

Q. What is the element 13 in that Harley patent?

A. The element 13-

By the Court:

Q. What figure?

- A. Figure 4 is described as being made of thermostatic materials, such as two strips of different metals properly connected together. It is a thermostatic element in other words.
 - Q. For automatically opening the circuit?

A. That is what it does there.

Q. Of course, in this patent there is no complication of

any other spring involved?

A. It would simply serve to separate the two contacts under heat and close them again when the heat dropped.

Q. In other words, there is no latch?

A. No latch.

Q. And no spring!

A. And no spring.

[fol. 167] Mr. Allyn: That is the case in claims 2 and 3 of Mead's. There is no latch and no spring. Does your Honor want to proceed the same as before?

The Court: Yes. Is there anything further to bring out.

Intermediate cross-examination.

By Mr. Huxley:

Q. It is a so-called hunting thermostat that opens the circuit, and when the heat goes down it closes it?

A. I should describe it as flasher, flashing on and off. It might be used in connection with an electric lamp to flash it on and off.

Q. Was there anything said in the specification in regard to the character of the element 13?

A. I don't see anything. I don't renumber anything except right there where it says it is made of thermostatic material such as two strips of different metals properly connected together.

- Q. If the temperature was a high one to which the thermostat was subjected, I suppose one kind of thermostatic metal might be used, and that if the temperature was a low one where it was desired to close it, some slightly different characteristic of thermostatic metal would be used?
- A. The conditions would govern the choice of metal, and experimentation would determine which metal was the best. You have a general specification of metal due to the conditions, and from that point on you have to experiment to find the best one.
- Q. I notice that this patent goes back to 1907. Had you graduated from the Massachusetts Institute of Technology by that time?
 - A. No, I had not.

Q. What was your year?

A. 1913 and 1914—1913 in mechanical, and I took an extra year in electrical.

Q. To make some definite date: Did you have a knowl-[fol. 168] edge of bimetallic thermostats at that time?

A. I wasn't working in that art at that time.

Q. You were not working in that art, but did you know about them?

A. Oh, yes, certainly.

Q. And you knew that those were for high temperature and low temperature and different kinds, according to different requirements, is that right?

A. I wasn't working in the art. I knew that there were bimetallic thermostatic metals on the market. I didn't know anything about their characteristics, because I had never used them in any device on which I worked at that time.

Q. But you did know that they were common things on the market?

A. I knew that there were thermostatic devices on the market.

Mr. Huxley: That is all.

Direct examination (Continued).

By Mr. Allyn:

Q. Now, in the Denhard patent 1,143,572, what controls the circuit?

The Court: What is this cited against?

Mr. Allyn: This is cited again to show the state of the art of thermostatic control switches.

The Court: What claims?

Mr. Allyn: This applies particularly to the Mead device, limiting claims 1, 2, 3, and 11.

The Court: All right.

By Mr. Allyn:

Q. Briefly mention what controls the opening of the circuit.

A. Well, there is a thermostatic element there anchored at one end and free at the other. The two different metals [fol. 169] are indicated in Figure 1 by No. 61 and 62. An extension of that thermostatic arm on the free end slides another member up and down. The member has a series of numbers, 67, 56. It is a composite strip—a latching strip.

In order to operate the device you have got to push the button 33, which comprises spring 30 and which has a peculiar double cone-shaped member there on which rides a coil spring—a so-called sphincter spring—and as you push the plunger 33 in, that spring opens out. The parts associated with that spring ride up on the conical member and slide down on the other end and make a quick contact. Now, the thing is latched. Spring 33 is compressed. When the heating element in the iron gets hot, your thermostatic member warps, pulls down the long latch member with the various numbers on it, which interlocks with slot 57 in the plunger 33, releasing it under the influence of spring 30 and throwing the switch member back over the double cone-shaped actuating part, so that you get a quick break in the circuit.

By the Court:

Q. Contact is between 24 and 31?

A That would be. The members in Figure 3, I believe, are indicated by 26 and 27 up near the handle there, the upper end, on opposite sides. That bridges across between those contact members.

Q. What is the function of spring 24, the sphincter spring?

A. Its function is, it is like a toggle. Once it has passed its mid-point it works quickly down the slope of the conical rod. It is a quick make and break.

Q. Yes, but what does it do when it gets there?

A. It in itself has no other function than to cause the thing to act quickly once it has passed mid-position, to [fol. 170] cause the contact-bridging member 25 to act quickly once it has passed its mid-position. In such a device as is shown here there is considerable current involved. Unless you make it and break it quickly, you get bad arcing and burning.

It is a snap-switch of a kind.

Mr. Huxley: Has your Honor another question, or may I ask one or two?

By the Court:

Q. Referring to Figure 1, I do not know that it is very important. It is hard for me to visualize the contact that makes and breaks. Refer to Figure 1; 26 is evidently one contact, is it not?

A. Yes, sir.

Q. Does the other contact show in Figure 1?

A. No, sir. It is in the section that has been cut away. It shows in Figure 3 as 27, a duplicate of 26 on the other side of the operating rod.

Q. On the other?

A. On the right-hand side of Figure 3 in the same relative position as 26, to the vertical center line of Figure 3.

Q. Would it be the bar or abutment shown in Figure 21

as 281

A. 28 is the part on the moving switch member which bridges 26 and 27.

The Court: All right. Go ahead.

By Mr. Allyn:

- Q. What actuates the thermostatic release in that device?
 - A. The heat.
 - Q. From what?

A. From the heating element which is adjacent to it.

Mr. Allyn: That is all.

[fol. 171] By the Court:

Q. Is there a reference to the heating element?

A. There is a reference 4. That is to the element itself, or the insulation between it. I think it is the element itself 4. The resistance unit 4, yes, sir.

By Mr. Allyn:

Q. Look at the element 62, 63, and see if that is not a thermostat.

A. That is the thermostat.

The Court: I was asking as to the heating element.

Mr. Allyn: I beg your pardon.

The Witness: The heating element is 4.

By Mr. Allyn:

Q. The heating element and the thermostat are right adjacent?

A. They are adjacent.

Mr. Allyn: That is all.

Intermediate cross-examination.

By Mr. Huxley:

Q. As a matter of fact, what is the element 6? That is a piece of mica, isn't it?

A. I will have to have that patent again.

Q. Insulating material?

A. It is drawn as insulating material.

Q. And it is so described in line 66 of the specifications, line of the specification?

A. One or more layers of insulating material.

- Q. One or more layers of insulating material 6, preferably comprising sheets of mica which insulate the same from [fol. 172] the bottom of Section 1. Now, between the resistance element and the thermostat, which is the bimetallic thermostat, which is 61 and 62, there is a strip of insulating material, isn't there?
 - A. Correct.
- Q. Now, on Page 3 of the specification, beginning at line 106, it states as follows: "In other words, it is the temperature of the working face of the iron that it is desired to regulate, and the thermostat will naturally function with

the greatest efficiency when located contiguous to the working face."

The Court: Where is that?

By Mr. Huxley:

Q. That is page 3, beginning line 106, 106 to 110. As a matter of fact, Mr. Wolfson, this device is simply a safety device to prevent the iron from getting too hot, isn't it?

A. It opens the circuit.

Q. It opens the circuit, and in Figure 1 the circuit is shown—I mean the parts are shown in open position, aren't they, open-circuit position?

A. They are shown in open-circuit position.

- Q. Yes, and if you shoved the member 21 in then this part shown as 25 and 24 would go over to the left and slide down the beveled surface at the left there, one of the beveled surfaces being marked 20.
 - A. Yes, sir
 - Q. Then you close the circuit that way?

A. It is a quick make-and-break device.

Q. A quick make-and-break device. And all it does is it opens the circuit to prevent the iron from getting too hot?

A. And the circuit has to be closed manually.

- Q. It is merely to prevent the iron from getting too hot, isn't it?
- A. That is the purpose of thermostats in flat-irons, as I understand them.

[fol. 173] Q. But the purpose here is to prevent this surface from getting too hot, the iron from getting too hot, isn't it?

A. Certainly.

Mr. Huxley: Yes. That is all.

Direct examination (Continued).

By Mr. Allyn:

Q. Isn't that one of the purposes of the thermostat in the patents in suit?

A. If it didn't, the unit would burn out.

The Court: The answer, I take it, is "Yes."

By Mr. Allyn:

Q. Turning to the Stahl patent 1,372,207.

The Court: That is cited against what?

Mr. Allyn: This is cited to show the use of thermostatic metal as a latch per se.

Mr. Huxley: Not as an anticipation, but to show the state

of the art.

Mr. Allyn: That is correct.

The Court: What patents and claims? I suppose you confine it to Cohen.

Mr. Allyn: This is applied to the Cohen device.

The Court: Both Cohens.

Mr. Allyn: I think Mr. Cohen has emphasized it particularly with respect to No. 2 Cohen patent, but it applies also to the No. 1 Cohen device. It shows a use of that, as I so understand it.

By Mr. Allyn:

Q. Mr. Wolfson, will you glance at that and state what the elements 15, 13, 10 and 23 are?

[fol. 174] A. 15, 13, 10 and 23. 15 and 13 and 23 are all parts of one piece of thermostatic metal bent so as to form a latch. 20—10 is the abutment for that latch. It is a pin on which that latch rests in the inoperative position.

Q. What is this latch 10 carried by?

A. Latch 10 is carried by a plunger 12. The operation is that you press the plunger 12 and the pin 10 rides along the back 23 of your thermostatic piece, passes it by. When the plunger 12 is released, the pin 10 comes up on the under side of the latch 15 and stays there until the thermostatic metal gets out of the way under the influence of spring 9.

Mr. Allyn: That is all.

Intermediate cross examination.

By Mr. Huxley:

Q. What heats the thermostat?

A. The thermostat is heated by a strip of resistance metal variously indicated at 19 and 22 on both figures 1 and 2.

Q. It is that part wound round?

The Court: It is a coil, isn't it'

By Mr. Huxley:

Q. It is a coil?

A. It is a winding around the thermostatic metal.

Q. And that is correct. This is simply a circuit-breaker, isn't it?

A. It would serve to interrupt an electrical circuit, under the influence of current passing through the thermostatic metal.

Mr. Huxley: That is all.

Mr. Allyn: Does your Honor have any questions to ask? The Court: No.

[fol. 175] Mr. Allyn: Now, the Morris patent, 1,376,154, anticipates claim 11.

The Court: Just a minute. All right, anticipates what? Mr. Allyn: Claim 11 of Mead, and otherwise shows the state of the art tending to invalidate any broad interpretation of Mead's claims 1, 2, and 3, and the claims in suit of the two Cohen patents.

Direct examination (Continued).

By Mr. Allyn:

- Q. You have seen this Morris patent before?
- A. I am quite familiar with it.
- Q. That is one of the patents the Cuno Company was licensed under?
 - A. It is.
- Q. In that device, if there was no spring 28 in the socket and you inserted the plug all the way in, what would happen?

Mr. Huxley: I object to that. Possibly we would get ahead quicker if we had an explanation of what the patent is first, not a hypothetical question.

Mr. Allyn: I thought it was so obvious, the construction and operation, that I did not want to waste time. If Mr. Huxley does not understand it—

The Court: It is doubtless obvious to the witness, but I think two or three weeks ago it was obvious to me after some study, but it has slipped from my mind. It would be helpful to have just a brief description.

By Mr. Allyn:

Q. I would like to ask you, then, to describe briefly what

you think this patent shows.

[fol. 176] A. It shows a plug and socket type of lighter. Figure 1 shows the plug practically in section. It has a carbon heating element 16 as shown here. The plug fits into a socket shown in Figure 3.

By the Court:

Q. Just a minute. Isn't the carbon heating element 22

in Figure 11

A. 22, as I see it, is a holder for one end of the carbon, a spring-pressed holder for one end of the carbon, to keep it in good electrical contact with the other parts.

Q. What is the carbon itself?

A. As I see it, it is numbered 16 out there.

Q. What figure?

A. Figure 1.

Q. 161

- A. Out in the open there, toward the left-hand side above the center line.
- Q. Which is the inner end of the plug shown in Figure 1, the left or the right?

A. The left. The innermost portion is marked 17.
Q. And the carbon is carried inside the cylinder 17?

A. Inside the cylinder 17.

Q. I have got it. Now, go ahead.

A. - in this particular disclosure.

Q. Go ahead.

A. The plug is inserted in the socket, which in the usual manner is grounded.

Q. Does that show? Where is the socket?

A. In Figure 3. Figure 3 shows the receptacle for the plug or the socket. It shows a flange, abutted against something that is supposed to represent a dash, probably.

Q. Which is the open end of the socket?

A. The open end of the socket is-

Q. The right or left?

A. The right.

Q. What is this knob 3 that seems to close the other end!

A. That is screw 3. That is a side view of a screw head. That is also shown in Figure 4 as No. 3.

[fol. 177] Q. I see.

A. The plug is inserted into the socket.

Q. Go ahead.

A. Post 24 of the plug is engaging groove 25 in the socket.

Q. What figure are you looking at now?

A. The plug is Figure 1. The socket is Figure 3. The assembly is incompletely sketched, so I am not referring to that. Figure 1, the post 24 on the underside of the holder, fitting into groove 25 in the underside of the socket tube in Figure 3——

Q. Go ahead.

A. Permitting longitudinal movement of the plug in the socket. To operate, you push on the handle 15 in Figure 1 on the very right-hand side, and the left-hand end of the plug 17 meets the contact 7 in the bottom of the socket shown in Figure 3 and also in Figure 5, which is the live contact. The circuit is then from 17 through the carbon, to the carbon-holder 13, to the—

Q. Where do you find 13, what figure?

A. About midway of Figure 1 on the lower side.

Q. Go ahead.

A. Through to number 10 on that figure, which is an electrical engagement with the socket tube in Figure 3, No. 1, and then the ground.

When you release pressure on the handle the thing springs into inoperative position in the socket, in which the two contacts 17 and 7 are—17 on the plug and 7 on the socket, are out of engagement.

Q. No thermostat?

A. No, sir.

By Mr. Allyn:

Q. In the form shown in Figure 7 the end of the carbon 16 extends out through the outer end of the plug, does it not?

A. It does. I believe that Morris stated that was for purposes of lighting a pipe or something of that general nature, as an alternative construction.

[fol. 178] Q. Morris on page 2, lines 4, et seq., says he prefers to provide means for holding the incandescent element 16 out of electrical connection.

The Court: Where is this, Colonel? You said page 4. Colonel Allyn: I thought I said page 2.

The Court: What line?

Colonel Allyn: Page 2, lines 4, et seq., Morris says: "It is preferred to provide some means normally for holding the incandescing element 16 out of electrical connection with the terminal 7 and to this end a helical spring 28 may be arranged within the socket member 1 to cooperate with the removable plug 10 about the bushing 18 in the manner shown in Fig. 5, thus holding the terminal 17 out of electrical connection with the terminal 7."

By Mr. Allyn:

Q. If the spring 28 were omitted and you pushed the plug in, what would happen?

A. The lighter would remain in circuit and burn out.

Q. When you add the spring 28, what happens?

A. When you release the knob, even though you do not remove the plug, the lighter returns to inoperative position automatically.

Q. In other words, that has automatic means for opening the circuit upon release of pressure on the knob.

A. That is what would happen.

Q. I show you a sample and ask you if you will please tell the Court what that is.

A. That is marked "Surelite," Surelite Products. It is a lighter as shown in Morris, with the addition of Adams' handle. It is a Morris type of lighter, to which has been [fol. 179] added a thermostat so that when you push the knob in it locks the lighter in the "on" position, and when the carbon element heats, the thermostat becomes heated, flexes, and the lighter is released into its inoperative position. A simple thermostat actuated by heat from the radiation and convection from the heating element, in this particular example.

Q. I notice some solder in one side of the socket. Please tell the Court what that is and how it happened to get

there.

A. That was put there to seal off a J-slot member which was in this lighter to provide for locking it by rotation in the inoperative position. It is shown in Morris as 27 in Figure 5, which was an extension of the groove 25 shown in Figure 3. It was provided as a safety feature. I believe, in Morris, so that if anyone leaned against the knob the thing would not go into operative position, not having anything to open the circuit again when it got hot.

Mr. Allyn: I would like to offer that as an illustration of the Morris device, showing the simplicity of the addition of a thermostatic latch.

Mr. Huxley: I object to that as immaterial. It is not

the Morris.

The Court: Sustained. I do not think it is evidence.

Mr. Allyn: Am I not justified in asking the witness what it would be necessary to do to the Morris device to add a thermostat, and what would be the effect?

The Court: I think perhaps you could do that.

Mr. Huxley: Isn't this a pure matter of argument?

The Court: That is exactly my view. I think it would be entirely proper for you to take that exhibit in final argument and say, "It is our contention that Morris [fol. 180] plus this, or Morris plus that, will produce such and such a result, and here is an illustration of our argument of it." That does not change the argument into evidence.

Mr. Allyn: I am satisfied to do that, but I thought to put a man skilled in the art on the stand and to subject him to examination by the Court and by cornsel for the other side, might be helpful.

The Court: I do not think it is evidence.

Mr. Allyn: Then I understand that this is not admitted. The Court: If, as I understand, it is not a specimen of some prior commercial art.

Mr. Allyn: It is a specimen with the addition—

The Court: With modifications?

Mr. Allyn: It is an actual specimen with the addition of a thermostat. That is correct.

The Court: I think because it has additions it is not evidence. It is argument only.

Mr. Ailyn: Very well.

By Mr. Allyn:

Q Now, Mr. Wolfson, what would it be necessary to do, in your opinion, to that device shown in the Morris patent, to make it an automatic thermostatic lighter?

Mr. Huxley: I object to that on the same ground.

The Court: I think it is a proper question for an expert. I understand throughout that he is now speaking of a matter of opinion rather than of fact. I will admit the question.

A. Of course, you have to provide an actual thermostatic member with a latch of some fort which would en[fol. 181] gage with some part of the plug to hold it in
the "on" position. In order to make your thermostat
member effective, it is necessary to open up the socket
No. 1 in Figure 3 of Morris so that the heat of the element
can have more ready access to the thermostat. For that
reason, it is also necessary to do away with this safety
recess 27 that Morris has put in there.

By the Court:

Q. In what figure?

A. Figure 5. So that the plug can only go in the socket in one position, somewhat similar to the Mead lighter, so that the opening in the plug which gives access to the heating element is opposite the opening which you have made in the shell under the thermostat. It is also necessary to provide some form of a detent in the socket 2, co-acting with some sort of a corresponding recess in the plug member so that on release, under the influence of the spring 28, Figure 3, the plug would not jump completely out of the socket

I think that—and providing the necessary electrical connections for your thermostat in the circuit—are all that is required.

Mr. Allyn: Are you through?

Mr. Huxley: I think I have no questions.

The Court: All right, let us go on.

Mr. Allyn: I turn to the Langos patent 1,697,686. This is also referred to, if your Honor please, to show the coaxial arrangement.

The Court: Could you wait just a minute till I find it.

Colonel? (Pause) I have it.

Mr. Allyn: This is mentioned to show the disclosure of coaxially disposed members in a cigar lighter socket, as bearing upon the claims of the two Cohen patents which [fol. 182] involve axial and socalled coaxial relations, as showing the state of the art.

Mr. Huxley: State of the art only?

Mr. Allyn: Yes, sir.

By Mr. Allyn:

Q. Now, Mr. Wolfson, what are the elements 9-9 in this patent?

A. They are spring members co-acting with the groove 27 in the plug member B in the shell 17 on the plug member B, to retain it in open-circuit position and in axial relation with the contact in the base, there being little or no bearing in the base itself for the member other than these spring fingers.

I think that is more clearly shown in Figure 5 than

anywhere else.

Q. At the bottom of Page 1, Column 1, and the top of Column 2, Langos refers to three rivets 8, which rivets also act to hold corresponding springs 9.

A. That is correct.

Q. Does that mean that there are three springs?

A. That means that there are three springs because there are three positions shown for the rivets 8.

Q. And they would be arranged around?

A. Symmetrically.

Q. Symmetrically around the axis of the socket and the plug?

A. That is what they are shown there.

Q. In all of these plug type lighters, the plug member is coaxial with the socket. Is that not right?

A. All of them that I know of.

Q. And that is true in the Mead patent, is it not, that the plug and the socket are coaxial, in the Mead patent?

A. Certainly.

Mr. Allyn: That is all.

[fol. 183] Intermediate cross-examination.

By Mr. Huxley:

Q. Now, in the representation shown in Figure 4, the device is in the open-circuit position, is it not?

A. It is.

Q. The removable portion is on the lower part of Figure 4, is it not, the part that you take out, take off?

A. No.

Q. No, it is on the upper.

A. No, the removable portion is on the upper.

Q. It is on the upper portion of Figure 4, the part that is removed?

A. The part marked "B".

Q. When the part marked "B" is moved into circuitclosing position, it has to be held there in order to keep the circuit closed, does it not?

A. That is correct.

Q. There is no thermostat shown in this device, is there!

A. This is a non-thermostatic lighter.

Mr. Huxley: That is all.

Direct examination (continued).

By Mr. Allyn:

Q. In your opinion, Mr. Wolfson, would it require any more than mechanical skill to add thermostatic latches to this device to hold it in the closed-circuit position?

Mr. Huxley: I object to that. As to whether a thing is mechanical skill or whether it is invention I think is solely for the Court to decide.

The Court: Sustained.

Mr. Allyn: I would like to refer to Copeland 1,844,206.

The Court: This is cited against Mead? Mr. Allyn: That is cited first against Mead?

Mr. Huxley: For what purpose?

Mr. Allyn: For the purpose of anticipating any broad [fol. 184] interpretation, invalidating any broad interpretation of claims of the Mead patent.

Mr. Huxley: Isn't it a fact that the defense pleaded in reference to Copeland is prior invention and prior knowledge as indicated by the filing date of the application?

Mr. Allyn: That is true.

Mr. Huxley: And the patent of which was issued long subsequent to the time when Mead filed his application. That is correct, is it not?

Mr. Allyn: They were co-pending in the Patent Office, and

Copeland issued after without any interference.

Mr. Huxley: So the defense is prior knowledge and prior invention as indicated by the earlier filed application; is that correct?

Mr. Allyn: It is a completed invention as of the date of

April 18, 1927.

Mr. Huxley: Yes. And pleaded for prior invention, prior knowledge.

Mr. Allyn: That is correct.

The Court: This is also cited against the Cohens?

Mr. Allyn: Yes, sir, as shown coaxially disposed igniter and socket members, and if I understand the broad contention of the plaintiff, a coaxially disposed thermostatic member. It is supported in equal distances on opposite sides of the center, and has a contact directly in the center, in the axis of the tube. That is in the form shown in Figure 2.

By Mr. Allyn:

Q. In this device, Mr. Wolfson, I wish you would explain

briefly how the device of Figure 2 works.

[fol. 185] A. Well, in Figure 2 is shown dotted the outline of what appears to be a cigar, resting in the tube 11 against the heating element 14. This lighter is then in the inoperative open-circuit position. A thrust on the outer end of that cigar would cause the heating element 14 and its associated parts to pivot on the pin 22, and the rear contact of that heating element resting against the buckling spring 23 would push it past center to a buckled position in the opposite direction where it would rest against a contact on the thermostatic arm 24, pressing that arm down so that the contact on it, and the corresponding contact numbered 28 on the base of the mounting would close the circuit through both the heating element 14 and the heater winding on the thermostat 24. Now, after a passage of time had been sufficient for the current flowing through both the heater element 14 and the winding around the thermostat which are in series, had heated the thermostatic metal to such an extent as to increase its buckling tendency against the spring, buckling spring 23, it would throw that spring back to the opencircuit position as shown, provided, of course, that the thrust on the cigar had at that time been removed.

Q. What relation is there, if any, between the temperature of the igniter coil 14 and the thermostatic device?

A. It is a fixed relationship depending upon the relative resistance of the heating element and the heater winding around the thermostat. The same current passes through them both, and you would merely have to adjust the heater element winding so that it would not operate—the thermostat winding, pardon me—so that it would not operate the thermostat until the heating element had come up to satisfactory heat; and also, so that it would operate before the heating element had had an opportunity to over-heat and burn out. Once that proportion was fixed, it would so operate.

[fol. 186] Q. Is there in this device any radiation of heat from the igniter element, or convection of heat from the

igniter element?

A. There could not help but be some, because of the relationship between the parts. The reason, main reason in my mind, for the winding around the thermostat, is that in this device a small amount of current only is required to operate the heating element. The heating element is not required to store heat as it is in a lighter where the plug itself is removed and used to ignite a cigar or cigarette. Therefore, the heat available, the total heat available, is less and an auxiliary winding would probably be essential.

Mr. Huxley: Is that all?

Intermediate cross-examination.

By Mr. Huxley:

Q. Mr. Wolfson, in connection with the Copeland showing, there is no removable igniter element carrying a resistance coil for the purpose of lighting a cigar, is there?

A. There is none shown.

By the Court:

Q. What was that?

Mr. Huxley: There is no removable igniter element with a resistance for the purpose of lighting a cigar.

A. Except that the whole base of the socket tube is a separate piece containing the igniting unit which could be removed if so desired.

By Mr. Huxley:

- Q. That is correct. It could be removed for cleaning purposes and the like if desired.
 - A. It could.
- Q. But there is no description or hint in the operation that in order to light a cigar there is a part that is removed [fol. 187] is there?
 - A. Nothing so stated in the patent, that I know of.
- Q. In this patent, there is a draft constantly going upwardly, referring to Figure 2, for instance, going right up through the tube 11, isn't there?

- A. That is quite true. There in all probability would be.
- Q. And so mentioned in the specification, for example, between lines 14 and 17 of page 1. That is correct, isn't it?
 - A. That is correct.
- Q. Now, in order to light the cigar, of course, the cigar is constantly held in engagement with the resistance 14, is it?
 - A. Right.
- Q.14. And during that entire lighting period the circuit is closed, is it not?
 - A. Correct.
- Q. The draft which is going upwardly as I have just described and you have agreed, would carry any heat from the resistance coil up into the cigar, would it not?
 - A. It would carry some of the heat.
- Q. Well, it would carry, by all odds, the bulk of the heat, wouldn't it?

Because if you put a cigar in this device, in order to light it effectively you have got to have a draft equivalent to a sucking in the mouth when one lights a cigar. That is true, isn't it?

A. No, sir, you have not.

By the Court:

- Q. What?
- A. You have not:

By Mr. Huxley:

- Q. In other words, you think you could efficiently light the cigar without any draft?
 - A. Through the cigar. I know you could.
 - Q. But there is a draft described just the same?
 - A. There is a draft described in this patent.
- Q. And that would take the heat of the resistance coil [fol. 188] away from the thermostatic element?
- A. Except that which went through the metal parts of the element. My opinion is, wherever you have metallic contacts you have conduction of heat.
- Q. Now, the operation of the thermostatic bar 24 is entirely controlled by that little coil of wire wound around it as shown in Figure 2, directly to the left of the lead lines from the No. 24. That is correct, isn't it? That is the way it is heated?

A. That is purely conventional. It shows a coil of wire.

Q. Yes. But the heating of the thermostatic bar is by means of something that is wrapped around?

A. A coil of wire.

Q. A coil of wire wrapped around the thermostatic bar itself. So it would operate as explained in the patent after a given time, wouldn't it? As stated for example on page 1, line 29, after the lapse of the required time.

A. That is quite correct.

Q. So that if it was an extremely cold day, for example, and the draft coming up through was at a very low temperature, the coil wound around this thermostatic bar would operate the bar itself by means of that coil after a given time, entirely irrespective as to the heat of the resistance coil itself, would it not?

A. No. Because if it was the same ambient condition, the same atmospheric conditions acting on the heating element would be acting on the thermostat and its coil.

Q. But the actual heat that operates the thermostatic bar

is the heat from the coil around it?

A. Yes. But that is subject to dissipation, the same as the heat acting on the heating element through difference in atmospheric conditions. Once you have proportioned the two windings so that they would act together by means of the same current passing through both of them, they would always act together regardless of ambient conditions.

[fol. 189] Q. But you would simply establish such a relationship in the thermostatic bar. Certainly you will agree with me that it does not respond to the heat of the resist-

ance coil 14, does it, to operate it?

A. No, but it acts responsive with, or responsive to the heat, because they are tied together inseparably by that relationship between the windings.

Q. But that is the only connection, isn't it?

A. That is the only connection.

Q. In this sort of a device I think you said there is no necessity of storing the heat, is there, in the resistance coil, because the circuit is closed all the time while the cigar is being lighted. That is correct, is it not?

A. That is correct.

Q. How soon would you judge that the resistance coil 14 would become incandescent in the Copeland disclosure there with the sort of a resistance wire that they have, that he has indicated?

A. From my experience with cigar lighters, both of the cord type and the cordless type, the non-automatic and the automatic, I should say that that would be a type of heating element which was well-known in the art, such as was used in the old reel type of lighters. Perhaps you could draw six or seven amperes and be so proportioned as to come up to heat in eight or ten seconds.

Q. Oh, less than that, wouldn't it? In that type? That was where the round resistance wire was used, was it not?

A. It all depends.

Q. Without storing the heat?

A. Well, we used a flattened wire ourselves.

Q. A flattened wire. But it comes up to heat very rapidly, does it not, because your circuit is constantly closed. There is no necessity of storing heat. That is right, is it not?

A. The action of a heating element is governed by a [fol. 190] number of factors. The rate of heating and the rate of dissipation of heat. It is all tied in with the design and the physical dimensions of the unit. You can vary units considerably over a range, reasonable range, by varying those conditions of heat generation and heat dissipation.

Q. But in Copeland the cigar remaining in contact with the resistance constantly during the lighting period, and there being no necessity for storing the heat, the natural way would be to make it heat up immediately, would it not?

A. No. We found in experimenting with this very type of lighter that if you get too hot a unit, one that flashes up too quickly, you burn away the wrapper of the cigar or cigarette, and defeat the purpose. It is better to have a slow unit which comes up slow. And that can be arranged.

Q. The mere bringing up of the resistance to incandescence does not turn the circuit off, does it? It does not

open the circuit?

A. It would, provided there was a co-acting winding in series with it operating the thermostat.

Q. But in Copeland you have the resistance of incandescence in order to light the cigar, and then the cigar has to remain there a certain period in order to get lighted; that is correct, isn't it?

A. Lighting doesn't take place any more quickly here than it does when you use a different type of lighter which

you pull out and apply to the end of the cigarette in your mouth.

Q. But you have to hold the cigar—you have to let the cigar remain there in order to get it lighted after the resistance gets heated up, don't you?

A. It all takes place in about the same time as people

are normally used to having lighters act.

[fol. 191] By the Court:

Q. Mr. Wolfson, I do think that on cross examination you ought to be more responsive to questions.

A. All right, sir.

Q. Mr. Huxley asked you a proper question.

A. Will you re-state the question?

By Mr. Huxley:

Q. In order to light the cigar in Copeland you hold the cigar in engagement with the resistance element, don't you?

A. You place it in engagement.

Q. You place it in engagement, and then when the resistance element comes up to incandescence you leave it there, as the patent says, for a given time, in order to get the cigar lighted, don't you?

A. There is a time element involved.

Q. You don't open the circuit immediately when the resistance element comes to incandescence, do you?

A. Not necessarily.

Q. You do not, do you? Copeland wouldn't work if you did? You have exactly as the patent says. It holds it there for a time element sufficient to light the cigar?

A. It is not instantaneous.

Q. It is not instantaneous. In other words, you don't open the circuit when you reach incandescence, you don't open the circuit until after you have kept incandescence for a material time; otherwise your cigar wouldn't light!

A. You have to hold it for a sufficient time to light a

cigar.
Mr. Huxley: That is all.

By the Court:

Q. You said, Mr. Wolfson, that when the proper relation is established between the winding on the thermostat

[fol. 192] and the resistance, thereafter the operation will not be subject to external variation?

A. That is what I said.

Q. Now, I understood you to say, or understood the effect of your testimony to be, that in this relationship between the winding of the thermostat and the resistance there is included a certain amount of convection and direct heat conduction flowing from the heater to the thermostat?

A. A certain small amount, your Honor.

Q. Now, wouldn't that amount vary in direct proportion with the bulk of the cigar that is inserted? For instance, I notice that you have an outline of both a cigar and a cigarette in the insert. The cigar appears to allow no clearance at the bottom of the socket on the left and a small clearance only on the right, whereas with the cigarette there is quite a substantial clearance. Now, the more clearance you have won't the conduction operate to bring the heat out through the socket with the draft and thereby create a variable on the operation of the instrument? Do you see what I mean?

A. In referring to this type of apparatus, your Honor, I have not been guided entirely by a theoretical consideration of the apparatus. We have done considerable work with apparatus of this general type, and we find that in many cases it is easier to light a cigar than a cigarette with the apparatus entirely horizontal and no upward draft

through it.

Q. I am going to take a recess now, and during the recess I am going to ask the reporter to read you my question and your answer. I am going to ask you if you think your answer is a fair one to my question.

A. I am sorry, your Honor.

Q. It was a long complicated question. I don't intend to be critical, and if you don't understand my question you can say so.

(There was a short recess.)

[fol. 193] S. L. Wolfson, a witness called in behalf of the defendant, resumed the stand and testified further as follows:

By the Court:

Q. My question is not conclusive; your own counsel can supplement it on re-direct. Bear in mind that if you or

your counsel don't think it is an important question, all you have to do is so urge. I don't think your answer was responsive to the question.

A. I wanted to be informative, your Honor. The point I was trying to bring out is that since both the thermo-

static---

The Court: I will withdraw the question and save time.

Mr. Allyn: I am sorry. I thought Mr. Wolfson could answer it. I haven't talked with him about it. I don't think he understood quite the pertinency of a direct question that requires a definite answer.

The Court: Let us make progress.

By Mr. Allyn:

Q. Mr. Wolfson, in a lighter of the Copeland type when does the cigar begin to get lighted?

A. Under all conditions tobacco will ignite before the ele-

ment comes to a visible heat.

Q. Is that what you understood Mr. Huxley to mean by incandescence?

A. No, I understand incandescence to mean a red or white heat.

Q. Then, you mean that it will light before incandescence?

A. Certainly.

Q. Upon what do you base that answer?

A. Upon experience in using both the cord-type and the cordless type of lighters.

[fol. 194] Mr. Allyn: Have you any more questions?

Mr. Huxley: I have not.

Mr. Allyn: The next patent I wish to call to Mr. Wolfson's attention is his own patent 1,980,157.

The Court: What is this cited against?

Mr. Allyn: This is cited to show substantially the identical structure of the Cohen No. 2 patent with the exception of the addition of thermostatic means.

Mr. Huxley: That is against the Cohen second?

Mr. Allyn: It applies particularly to Cohen No. 2 patent. Mr. Huxley: Is that for prior invention? I notice that

the date the patent was issued is 34.

Mr. Allyn: That is true. I overlooked that point, because we all know that this device was on the market in 1931. Mr. Cohen knows it and Mr. Johnson knows it.

Mr. Huxley: I want to be accommodating, but I can't accept those things.

Mr. Allyn: I will produce the prior proofs of the device.

Mr. Huxley: Is it pleaded?

Mr. Allyn: It does not have to be pleaded. It does not anticipate the terms of the claims. I haven't intended that.

The Court: Why don't you first, through the witness, put on the testimony of the prior use, and then won't the ground be cleared to refer to the patent as an illustration?

By Mr. Allyn:

- Q. Mr. Wolfson, you are familiar with this patent No. 1,980,157?
 - A. I am.
- Q. What do you know about the commercial situation with respect to that device?

A. As of when?

[fol. 195] Q. As of 1931.

A. We made a considerable number of those devices in 1931 and sold them to various car and accessory manufacturers and to the public in general through the jobbing trade.

Q. What was the trade number of that?

A. That was known as our No. 2610 lighter; the 26 with other various numerals for the different modifications of them.

Q. And is that one of the items included in the statistics which Mr. Huxley asked us to produce this morning?

A. I believe it is there referred to as the 2600 series.

Mr. Allyn: I wonder if the Clerk has that exhibit. It has been taken out by the Clerk, I am told, to have a photostat made. You didn't take any of the figures out of the chart?

Mr. Huxley: I don't remember them. No. They are in the record.

The Court: The precise number of the figures is not important, is it?

Mr. Allyn: No, but I wanted to make sure that we identified it, so that there would be no question.

Mr. Huxley: Have you a sample? We have no desire to raise any technicalities or anything like that.

Mr. Allyn: Ask your own client if you want to.

Mr. Huxley: No; ask your witness.

By Mr. Allyn:

Q. Please examine this sample that I show you.

A. That is an embodiment of the 2610 device, substantially as sold to the Ford Motor Company in the years mentioned.

By the Court:

Q. What years?

A. 1931, 1932, and up to 1934.

[fol. 196] By Mr. Huxley:

Q. May I ask a question? Are you sure that that represents the device that was sold back in 1931?

A. To the best of my recollection it does, substantially.

Q. Well, substantially. Can you point out any differences?

A. I don't recall any major differences. We might have changed slightly the contour of certain parts. This has a metal sleeve in the knob which, I believe, was not present in the very earliest ones. They operated exactly the same way.

By Mr. Allyn:

Q. I show you another sample plug and ask you if you can identify it.

A. That has the same type of device—that is the same type of device without the metal sleeve, which has been cut away to show the working parts.

Q. When was that device and sold, or one exactly

like it?

A. That is the so-called jobbing model which we sold to the general public when we first came out with that type of lighter, which was, as I have stated, in 1931.

Q. Does that differ in any respect from what was on the market and offered for sale and sold in 1931, 1932, and 1933!

A. The only modification that I see as I look at it more closely is that there is a rim around the heating element cup, which wasn't present on those models.

Q. How about the spring construction in the plug?

A. It is identical—off the same tools that made them all in those early days.

Q. What is this that I show you now?

A. That is a partially cut away socket for receiving that head, into which there has been placed in lieu of the stand-

ard contact a contact of thermostatic metal with latch ends.

Q. How does this plug alone that I have mentioned differ [fol. 197] from the plug shown in your patent 1,980,157, if at all?

A. The heating element is a modern one in which we have incorporated our standard commercial practice of welding. The heating element cup, as I said before, has a rim around it, which is not shown in the patent. I see no other material difference. It has been cut away for exhibition purposes.

Mr. Allyn: I will offer in evidence this plug with the cut-away portion, together with the socket which has just been referred to by the witness as a modified Wolfson device, the plug of which is claimed to have been on the market identically the same in 1931, 1932, and 1933.

By Mr. Allyn:

Q. Sold in what quantities to the Ford Company?

A. Thousands, surely. Tens of thousands probably. I haven't the figures.

Mr. Huxley: May I ask a question?

By Mr. Huxley:

Q. Do you know what time in 1931 that was put on the market?

A. No, I couldn't state the month from memory.

The Court: Before we go into that let me see if I can shorten matters by asking Mr. Huxley if it would be inconsistent with his position to concede that this exhibit has no patentable distinction from the second Cohen patent except for the thermostatic feature? That, I understand, is all it is being offered for, and perhaps you can concede that. I said patentable distinction.

[fol. 198] Mr. Huxley: I am afraid I could not, your Honor. I would be perfectly willing to stipulate to have the structure explained; but we must consider in every claim the cooperation with various elements, and so on. I am afraid that I could not stipulate that. We do concede, however, that this device was on the market in 1931. We are perfectly willing to stipulate to the facts.

Mr. Allyn: I want to be sure. Will you stipulate that that was on the market or one substantially identical with it, in 1931, 1932, and 1933?

Mr. Huxley: Yes, substantially the same.

(Stipulated Cuno plug offered in evidence and marked Defendant's Exhibit "O".)

Mr. Allyn: This particular one does not have the cut-away

plug head, the one as to which it was stipulated.

Now I should like to ask if you would also stipulate, Mr. Huxley, that this cut-away plug head is substantially the same as the one that was in public use and on sale in 1931 and 1932.

Mr. Huxley: Except for the heating element and its holder, that is correct.

Mr. Allyn: I did not intend to mislead my friend. That has a slight rim on the edge of the igniter element, which was not in the 1931 or 1932 construction.

Mr. Huxley: Oh, yes.

Mr. Allyn: I did not intend to mislead you.

Mr. Huxley: Isn't this other one sufficient for your purpose?

Mr. Allyn: No, because I want the Court to see this one in connection with the other part of the exhibit that Mr. Wolfson mentioned.

[fol. 199] Mr. Huxley: The part that surrounds the resistance element has been modified, has it not?

Mr. Allyn: Yes.

Mr. Huxley: From 1931?

Mr. Allyn: Yes. I told you that just now.

Mr. Huxley: I'm afraid we can't stipulate it, then.

Mr. Allyn: All right.

Mr. Byrne: It appears to us that all that remains as the same is the outer case, so I am sorry but we can't stipulate.

Mr. Allyn: Very well.

As to defendant's Exhibit O, I understand it is stipulated to have been in public use and on sale in 1931 and 1932 extensively.

Mr. Huxley: That is correct, with the exception of the metal sleeve in the socket.

Mr. Allyn: I understand that that was in use also.

By Mr. Huxley:

Q. There wasn't a metal sleeve in the plug, was there?

A. On some of them there was not. I don't know just when the change was made; early, however.

By Mr. Allyn:

Q. Does the metal sleeve alter the operation?

A. None whatsoever.

Q. This has no thermostatic device in it, is that correct (handing an object to the witness)?

A. That is correct.

- Q. Now, in that device there is a contact member in the bottom of the socket with four arms, is that correct?
- A. Two pairs of arms. The two pairs differ slightly. [fol. 200] Q. Would you say that they were coaxial with the socket?

A. I would.

By Mr. Huxley:

Q. In this Wolfson device after the plug element shown as 8-14 is pushed in, the circuit is closed, isn't it?

A. It is.

Q. And then the device is held there while the resistance element 8 is heated up to the proper temperature; that is correct, isn't it?

A. Yes.

Q. There is nothing to hold the device in the closed-circuit position, is there?

A. No.

Q. You have to hold it by your hand?

A. Yes.

Q. There is no thermostat in this, is there?

A. None.

By Mr. Allyn:

Q. What would it be necessary to do to convert that to a thermostatic device?

Mr. Huxley: I object to that on the ground of mere argument, as to what you would have to do to change one thing over to another.

The Court: I don't think it is very helpful.

Mr. Allyn: If your Honor thinks that is not helpful, may I withdraw the question and ask the witness to state this:

By Mr. Allyn:

- Q. In what respect does exhibit M differ from the Cohen No. 2 patent in the essential elements?
- A. Perhaps that is best answered by showing the correspondence between them.

Q. Very well, explain it that way.

A. Spring 17 in the patent, the operating spring-

[fol. 201] Q. In the Wolfson patent?

A. In the Wolfson patent. It may be considered as spring 37 in the Cohen device. The sleeve 38 with its flange 39 in the Cohen device may be considered as part 4 and 41 in the Wolfson device, referring now to Figure 3 in the Wolfson device. The parts of the plug in the Wolfson device marked in the exploded view, Figure 3 as 5, 51, and so forth, correspond to the tubular parts-the unit holding parts of the Cohen device-having various numbers; the heating element of the Wolfson device staving into those parts as the heating unit of the Cohen device stays into the corresponding parts there. The spring in the Wolfson device reacts against the 41 flange on cup 4 as it does on the flange in part 38 in the Cohen device, on 1, and on knob in the Cohen device and on the knob in the Wolfson device on the other end. The difference now is that in the Wolfson device the 4-41 is not a close fit in the tubular holding device as it is in the Cohen device. Otherwise they operate in very much the same way. The pressure on the knob compresses the spring, and the unit, the whole plug body advances until contact is made. They differ in the fact, as stated before; that Wolfson has no thermostat to hold the unit in closed position, whereas Cohen has.

Q. In other words, the contact members 10 in Wolfson have been replaced by the thermostatic latch member 22 in the Cohen patent?

A. That is what I intended to convey.

By Mr. Huxley:

Q. Mr. Wolfson, in the Cohen device the thermostatic latch members 22 have the function, first, of closing the circuit, second, of holding the plug in its inner position, and third, of releasing that plug under the influence of the heat of the resistance coil? In other words, opening up the springs to allow the spring 37 to become effective; that is true, is it not?

A. Yes.

[fol. 202] Q. You don't find anything in the Wolfson patent save the arms 10 which form a contact; that is true isn't it?

A. That is true.

Mr. Huxley: That is all.

By Mr. Allyn:

Q. There is one other distinction with respect to the grounding of the plug in the socket. Won't you point that out?

A. Yes, there is a difference there that I have not thought of. In the Cohen device the grounding takes place through this yellow colored flange 45 and the finger lance out of the shell, part No. 50. In the Wolfson device the grounding takes place through the cup-shaped member 4 butting against the socket tube end.

Q. So that the Wolfson device, is a single-break device and the Cohen device is a double-break device, is that cor-

rect?

A. If the parts are accurately proportioned, the Cohen would be a double-break device and the Wolfson a single-break device.

Mr. Allyn: Have you any more questions?

Mr. Huxley: No.

Mr. Allyn: If your Honor please, I want to explain my little joker, defendant's Exhibit A, which my friend was astonished at. It was only offered for identification. I would now like to offer it in evidence. It is a sample of a Casco device which I ran across and found that the plug was somewhat loose, so I deliberately bent the three little tongues slightly, to see what would happen if the plug were loose, and that is what was shown in the experiments (indicating). That was the sole purpose of it.

[fol. 203] Mr. Huxley: I object to it as immaterial. I

don't see that it has any bearing.

Mr. Allyn: In my opinion it has a very substantial bearing, because it is one of the vital things in the socket which is in no way disclosed in the Cohen patent. That is the purpose of it.

The Court: There is no basis in the evidence for it.

Mr. Allyn: May I have it marked?
The Court: Mark it for identification.

Mr. Allyn: It was marked for identification.

The Court: I don't see any basis in the evidence for it. The only identification was, as I recall it, the plaintiff's witnesses disputing the sample, and now I understand you to concede that the sample is distorted, and there the matter rests. How can I admit it in evidence over objection?

Mr. Allyn: It is to show what happens when there are

insufficient friction devices in the lighter.

The Court: There is no evidence as to how the insufficiency occurred. There is evidence that it remained operative for over twenty thousand operations. Are you offering it to show what happens to it after twenty thousand operations?

Mr. Allyn: I offered it to show what happens when the device is not provided with these friction fingers, and I contend that the patents are fatally defective in that they do not point out any such requirements in these devices. That is the purpose of it. There is no disclosure in the patents of that element of the commercial device which the plaintiff has found necessary to employ in its commercial structure.

Mr. Huxley: I don't see that that bears on it at all. Of course if you shoved those things in it will jump out, but [fol. 204] any mechanic knows that you want the proper friction fit.

The Court: It seems to me again that it is a question of argument.

Mr. Allyn: That is sufficient, the admission that my friend has just made.

Are there any more questions of Mr. Wolfson?

Mr. Huxley: Are we finished with the patents?

Mr. Allyn: I have comments on them, and there is the matter of argument.

Mr. Huxley: I just want to have it clear before they finally go in. There are some that seem to have a later date, and I think we should know of all those introduced why they are introduced and against what patents, whether in anticipation or to show the state of the art.

The Cour. Now is the time. The book was admitted subject to motion. If you want now to move to strike I should call on Colonel Allyn to specify why each one of them should not be stricken.

Mr. Allyn: I intended to explain the ones which have not been mentioned, but I was through with this witness, that was all.

The Court: Have you any other questions of this witness!

Mr. Huxley: I have a few general questions.

The Court: Very well.

By Mr. Huxley:

Q. In regard to the bimetallic member 54 of the Mead patent, as shown, for example, in Figure 16, I think you testified that if a high temperature bimetallic thermostatic wire were used there, it would not be satisfactory, in your judgment. Did you?

A. I did.

Q. There is also perfectly available low-temperature [fol. 205] thermostatic elements, is there not?

A. Presumably there is now.

Q. Don't you know that that has been true for many, many years?

A. I know that there have been various types of thermo-

static metals on the market for perhaps a generation.

Q. And the different types are used, that is, the temperature requirements, according to the particular needs that one has: that is true, isn't it?

A. It is.

Q. I think you testified that in connection with the Mead construction, as shown in sheet 2, if the plug were moved from engagement with the contact 53, that is, if the pin 75 were removed from engagement with the contact 53 and contacted the casing, there would be a short circuit. Is that correct?

A. I did.

Q. As a matter of fact, is the casing included in the circuit as shown in Mead at all?

A. Yes, if you look at Figure 21. If you will turn that around you will see that you have two connections. This one apparently is connected to the back plate (indicating).

Q. In Mead there are two separate wires shown throughout, are there not? That is, the one connection comes from a wire and then in the present practice it is often customary to ground on the frame of the machine, but in Mead's he shows two separate wires, doesn't he?

A. He does, and that is the reason for my statement that there is no indication of insulation between that cover and this base plate, which is grounded through one of the wires.

Q. Suppose it were connected in the circuit and there were danger of short-circuiting. In your judgment wouldn't it occur to anybody to put in some insulation?

A. I am of the opinion that there is no insulation on the sample that I see that such short-circuiting action would take place.

Q. That is your opinion?
A. That is my opinion.

Mr. Huxley: That is all.

[fol. 206] Mr. Allyn: As I understand it, we can offer these others without having the witness refer to them.

The Court: They have been admitted. I am now asking

Mr. Huxley a question.

Mr. Huxley: I would move to strike all this that has not been specifically discussed unless it is clearly stated for what purpose they are introduced and pertinent to what patent—whether as anticipation or to show the state of the art. If a definite statement is made as to why they are offered, I can then go ahead.

The Court: Very well, we will have to pick them out one

by one.

Mr. Allyn: There are only a few more.

Mr. Huxley: All right.

Mr. Allyn: I refer to Andrews 1,025,852.

Mr. Huxley: Why is that offered?

Mr. Allyn: This shows an electric heater. It happens to be in the form of a flat iron, but it is claimed more broadly than that.

Mr. Huxley: Pardon me. I don't like to interrupt, but is it introduced to show the state of the art?

Mr. Allyn: To show the state of the art.

Mr. Huxley: Against what patent?

Mr. Allyn: Against Mead's. Mr. Huxley: Against Mead's?

Mr. Allyn: That is right. Does your Honor wish any further explanations at this moment in connection with these?

The Court: I think you had better state what there is on the face of the patent that you think I should observe.

Mr. Allyn: I call attention to the fact that this is an automatic cut-out for electric heater. The particular form of heater is a so-called flat iron or sad iron in which there is [fol. 207] a thermostat 15 in the bottom in Figure 1, which is heated by the same coil which heats the iron. Figure 4 shows the electrical resistance circuit which produces the heat which makes the iron effective, and the thermostat is a bimetal strip 15 which actuates a switch to open the circuit when the device gets to an excessive temperature. It

automatically opens the circuit. The circuit can be closed again by pushing down on the knob 28.

The Court: What does that show that Langos did not

show? Was it Langos?

Mr. Allyn: No, sir. The Court: Denhard?

Mr. Allyn: It shows simply another form of the Denhard type of structure. The switch is much more simple than Denhard, but the thermostatic action is the same. It does not happen to have a strip of insulation between the iron and the thermostat in Andrews, and my brother called attention this morning to the fact that there was a mica layer 6, in Denhard between the thermostatic layer 61, and the heater.

The Court: Is it fair to say that its only contribution over Denhard is the elimination of the mica?

Mr. Allyn: I don't regard that as being any contribution.

The Court: Where is the contribution of Andrews to our present situation?

Mr. Allyn: It simply shows another automatic thermostat for turning off the heat on an electric heater, that is all.

The Court: In other words, it lends emphasis to Denhard?

Mr. Allyn: That is correct, nothing else. [fol. 208] The Court: Do you object to it?

Mr. Huxley: No.

The Court: Then, let it stay in.

Mr. Allyn: Denhard has already been mentioned. Cavanagh 1,294,045 shows the state of the art—

Mr. Huxley: The state of the art as against what patent,

if you don't mind?

Mr. Allyn: The state of the art against Mead, and also as showing a removable plug which, in a certain sense, corresponds with the plug of the thermostatic lighters. Here there is a spring switch member 7 in Figure 1, and the plug 8 is pressed down to close the circuit. The plug 8 is the model device. It is pressed down to close the circuit of the spring 7. The thermostat 9 interlocks with the plug which holds it in the closed-circuit position.

The Court: What figure are you on?

Mr. Allyn: Figures 1 and 2. The thermostatic arm 9 has a little projection 19 on the tip, which engages the shoulder 18 on the plug, to hold the plug down when the cir-

cuit is closed. When the thermostat heats, it releases the plug and the spring 7 snaps the plug up and opens the circuit. The plug is detachable with the bushing 14, being normally held in place by the U-shaped spring member 20, which is shown in Figure 3. There is a spring-latch member there which holds the plug in the box in either the open or closed-circuit position. That is all.

Mr. Huxley: There is no objection to show the state of

the art.

The Court: To clear it up in my mind, I should like to ask a question. Stahl 1,372,207: Does Cavanagh show anything over and above Stahl for present purposes except the fact that in Stahl a plunger and removable plug is substituted.

[fol. 209] Mr. Allyn: That is correct, but there is one other slight difference, namely, that in Stahl the thermostat metal, per se, is a part of the latch, whereas in the Cavanagh patent the thermostatic metal has a non-thermostatic tip 19. I don't think that is of any consequence, but my brother has argued and the attorney has also, in the file wrapper quite extensively on the subject of having the thermostatic metal act as the latch.

The Court: Does Cavanagh specify that the protuberance 19 is non-thermostatic?

Mr. Allyn: No, he does not, but he does not say that it is, and from a general knowledge of mechanics and drafting I would not expect that he would make that tip of thermostatic metal.

The Court: All right.

Mr. Allyn: I don't think it makes any difference. Now. Newsom 1,318,168—

Mr. Huxley: Will you tell us what this is for?

Mr. Allyn: The state of the art with respect to Mead. This shows a so-called automatic controlled electric coffee cooker. Here the coffee pot A——

The Court: What figure?
Mr. Allyn: In Figure 1.

The Court: Yes.

Mr. Allyn (Continuing): —rests on a grid-like member which contains the heating element No. 3, and above the top of this grid is a diaphragm 7 right in the center, which has a thermostatic member and is so arranged with a latch mechanism in the bottom that when the temperature of the

coffee pot reaches the desired extent the latch will be released and turn off the coil.

The Court: Where is the latch?

Mr. Allyn: The latch is in the bottom of the left-hand side.

[fol. 210] The Court: What number?

Mr. Allyn: A number of elements. I think there is a circuit diagram on the bottom of sheet 2, which shows the contacts 40 and 41 of a switch.

The Court: Where is the bimetal?

Mr. Allyn: There is no bimetal in this case. This is a different kind of thermostat. This is what they call an expansion diaphragm type in member 7.

The Court: What element is it that does the expanding? Mr. Allyn: The member 7 in a chamber which may contain air or may contain a liquid. It is a common form of thermostat. It causes the disc to expand and move the central post 9.

Mr. Allyn: A somewhat different form is shown in Figure 4 and still slightly different in Figure 3; but that is a well-known type of an expandable thermostat.

The Court: Looking at Figure 1, 7 is a wire coil in an air

chamber; is that right?

Mr. Allyn: No, sir. 7 is a diaphragm. It is called a thermostat.

Mr. Huxley: It cups more or less, does it not?

Mr. Allyn: Yes. There are two disks fastened together at the rim with a space between the disks. And when the thing gets hot the contents cause the diaphragm to expand, swell, so that the upper member and the lower member tend to separate in the center.

The Court: Well, that separation forces the plunger 9

down?

Mr. Allyn: That is right. Then it operates on some latch mechanism to open the circuit. The character of it is unimportant.

[fol. 211] Mr. Huxley: It is possibly most clearly shown in Figure 3, isn't it, where those two members, 13 and

52, are hooked together?

Mr. Allyn: Yes. In Figure 3 there is a different kind of latch, the same kind of device with the letter B on the outside and the thermostat inside. When the thermostat expands, plunger 9 moves down and trips the latch 50 away from 52. And the spring 54 throws the rod 52 to the right, viewed in Figure 3, and opens the circuit in the switch 55.

Mr. Huxley: That is it.

Mr. Allyn: The coffee pot in Figure 1 is separate from the rest of the mechanism. In the form shown in Figure 3, the heater is in the bottom of the coffee pot. It apparently is not readily detachable.

Mr. Byrne: You see it in Figure 1, Mr. Allyn?

Mr. Allyn: No, I think not.

Mr. Huxley: This, Mr. Allyn, is one of many devices where you close the circuit and then as a safety measure there is some sort of heat-controlled element that opens it.

Mr. Allyn: Not necessarily safety member. Open it for

many purposes. It is one of them.

Mr. Huxley: Patents issued for each one?

Mr. Allyn: For the specific forms shown, it quite frequently happens. Adams 1,373,583—

The Court: Prior art?

Mr. Allyn: —was offered solely to supplement Morris in showing a commercial form of the Morris device.

Mr. Huxley: State of art?

Mr. Allyn: It shows merely the state of the art.

Mr. Huxley: Pertinent to Mead.

Mr. Allyn: It is pertinent in the same sense that Morris [fol. 212] is, but it does not add anything to Morris, and if you object I have no objection to withdrawing it.

Mr. Huxley: The same as Morris?

Mr. Allyn: It explains the difference between the Morris

patent and the Morris commercial structure.

Zecchini 1,437,701 is on the state of the art with respect to the Cohen patents, and also showing a plug type cigar lighter at a date preceding that of Mead.

The Court: For present purposes, does it add anything

to the Wolfson exhibit you just brought in?

Mr. Allyn: It shows the type where the mechanism is in the plug in Zecchini, whereas the Wolfson commercial form had an outer sleeve as well as the interior plug portion. This shows a more compact form than the one with the external knob, with which really the inventions are interchangeable.

Mr. Huxley: Do I understand this to show the state of the

art pertinent to the two Cohen patents?

Mr. Allyn: That is right. And as showing a well type and plug type lighter preceding Mead because Wolfson did not precede Mead.

Mr. Huxley: No objection for that purpose.

M. Allyn: Hurxthal, 1.540,628. This is offered simply to show the state of the art generally. Structurally it has no resemblance to any of the patents in suit. It was referred to in the Chicago case, and my brother used it as an argument for the support of his contention. And I offered it to show a device in which the heat of the surface to be treated acts upon the member, the thermostatic member, to [fol. 213] open the circuit. Here the wire 17 in Figure 1 is arranged adjacent to the surface of the toast which is being heated by the heater. And when that wire has been heated to a pre-determined degree, which is that at which the toast is supposed to be most delectable, that wire 17, through a series of levers, trips the member 6 and opens so as to throw out the toast, and in page 1, the first column, lines 17, 18 and 19, the patentee says, "It is also possible to break the electric circuit leading to the toaster."

Mr. Huxley: No objection for the purpose stated, for the

purpose of showing the general state of the art.

Mr. Allyn: Metzger 1,622,334 is introduced solely that the Court may know what was cited against Mead. I cannot see that it has any bearing on the case other than that as explanatory, so that the Court may know what is cited.

Mr. Huxley: That has a plug that rotated to closed cir-

cuit, didn't it?

Mr. Allyn: There is some sort of rotative motion, but it is a very indistinct disclosure. But I don't know. I never saw anything like it.

Mr. Huxley: The state of the art pertinent to Mead; is

that right?

Mr. Allyn: I do not think it is pertinent to Mead. Mr. Huxley: All right. State of the art generally.

Mr. Allyn: I do not think the examiner cited the patented art as pertinent to Mead.

The Court: This is Metzger that is referred to in the Mead file wrapper?

Mr. Huxley: Yes, sir.

Mr. Allyn: It was cited against Claim 7, original Claim 7 of Mead. It shows how remote the Patent Office can some-[fol. 214] times be and how they can overlook the pertinent things.

Mr. Johns tells me that has not any rotary motion. I do not know whether it has or not. I never have been able to understand how the thing worked. I think we may as well

withdraw that other Langos patent 1,719,228, because I do not think it adds anything to 1,697,686.

Mr. Byrne: What number did you give, Mr. Allyn, please,

that you are withdrawing?

Mr. Allyn: 1,719,228.

Mr. Huxley: You have Mead here as one of the patents. Do you rely on that as an anticipation, or to show the state of the art with reference to Cohen?

Mr. Allyn: We rely upon Mead as showing the state of

the art preceding the Cohen patents.

Mr. Huxley: State of art, Cohen.

Mr. Allyn: Showing there is no invention in any broad respect in view of the disclosures, the descriptive disclosure of Mead.

The Court: But doesn't all the evidence you have given me which disparages Mead, serve to praise Cohen?

Mr. Allyn: No, I think not. I think not.

The Court: All right.

Mr. Allyn: That, I presume, is what my brother will argue. The structures are so obvious—the Cohen structures are so obvious, in view of the rest of the art. As I pointed out already, the first Cohen patent is no good. It never was any good.

The Court: Let us clear up these references. I did not

mean to start anything.

Mr. Allyn: It : 'er could be any good.

The Court: Let take our recess here till 2:10.

(At 1:10 P. M., a recess was taken until 2:10 P. M.)

[fol. 215] November 3, 1939, Afternoon Session

Mr. Allyn: I think this morning we had gotten down as far as the Wolfson patent 1,732,784 which was cited by the examiner against the first Cohen patent. I submit it for the information of the Court, and as showing the state of the art.

Mr. Huxley: With reference to the Cohen patents?

Mr. Allyn: It was cited against the application for the first Cohen patent.

Mr. Huxley: First Cohen.

Mr. Allyn: Yes. It shows a switch wholly within the plag member, as distinguished from being part between the plag

and the socket. That first Cohen patent stresses that, and I believe is limited. We contend that that first Cohen patent is limited to a construction in which a switch action lies wholly within the socket, and in Wolfson's patent which we have just mentioned there is a switch which is not automatic, but except that it is spring-pressed released, and that switch is wholly within the plug.

The Cohen patent says that the switch must be wholly

within one of the parts of the lighter.

Mahan 1,757,255 was cited by the Patent Office against the second Cohen patent. Your Honor will doubtless remember that as one of the references you had to consider in that case we had against Meehl. This shows the state of the art solely, and is for the information of the Court as to what the Patent Office thought might be pertinent.

Mr. Huxley: This is against the second Cohen?

Mr. Allyn: The second Cohen patent was cited against that.

The Court: I do not quite see why you cite these refer-[fol. 216] ences from patent wrappers. Is it your claim that some amendment occurred in the Cohen application which involved estoppel?

Mr. Allyn: That is correct. The arguments in the file wrapper show that the claims were allowed with limited scope; where they previously had contended for broad

claims, they obtained only narrow claims.

In this Mahan patent the plug carries an interior sliding member which has the igniter coil 9 on the inner end. When you push on the plug 16 you compress the spring 15 and bring the center member 12 against the stationary contact 27 in the socket. That closes the circuit at that point. The other side of the circuit is closed through the pins 30, and which engage the metal shell 6, which in turn engages the wall of the socket.

That shows a plug in which a part of the plug has the inner and outer position which is somewhat similar to the action in the two Coben patents. The plug moves in and out as it is closed, with the igniter, which is not the case in the Cuno device.

Copeland 1,838,363: It is to show the knowledge, prior knowledge by Copeland, as of March 9, 1927, of the idea of controlling the igniter circuit of a cigarette lighter by means of a thermostat. The circuit is shown in Figure 10. There the switch is similar to the switch shown in the later Cope-

land patent 1,844,206. There is a push button 21 and a plunger 18 adapted to be pushed in against a buckling spring, which in turn presses against a thermostatic member and closes the circuit. When the circuit has been closed for a certain time, the thermostat warps the thermostat arm and opens the circuit.

[fot. 217] Mr. Huxley: Do you think that adds any to the

other Copeland patent, Mr. Allyn?

Mr. Allyn: It shows the use of an automatic thermostatic release in a cigarette lighter as of March 9, which is a month and eleven days prior to the filing of the other Copeland patent.

Mr. Huxley: Yes, but aside from that, that difference of

a month, does it add anything?

Mr. Allyn: Weil, it precedes.

Mr. Huxley: Yes, I know it is a month earlier. Mr. Allyn: It precedes, rather than adding.

The Court: It precedes what?

Mr. Allyn: It precedes the other Copeland patent.

Mr. Huxley: It is about a month earlier.

Mr. Allyn: It is an earlier step in a cigar or cigarette lighter, an earlier step than in that other Copeland 1,844,206.

Mr. Huxley: This is March 9, 1927, and the other 1,844,206 is filed April 18, 1927.

Mr. Allyn: It shows the thermostat in the same way in

series with the igniter coil 27.

Cohen 1,944,925 was cited by the examiner against the first Cohen patent in suit, and in fact is referred to in this first Cohen patent on page 2, column 1, line 9, where Cohen says, "For convenience and clarity in the following description the present invention is shown as applied to what may be termed sleeve-type cigar lighters for use in automobiles similar to the lighter disclosed in my patent 1,944,925, issued January 30, 1934."

Mr. Huxley: That is state of the art; is that right?

Mr. Allyn: That shows the state of the art, particularly with respect to the first patent as set forth in the application, and also bearing upon the construction of the second [fol. 218] Cohen patent in suit. So far as this 1,944,925 is concerned, it will be seen that there is a switch in the base of the socket having two movable contacts which are brought together when the plug is inserted. The two contacts are separated automatically by the use of a spring when the pressure on the plug is released. The first Cohen patent

in suit merely adds a thermostatic latch in that base member. The action is otherwise substantially the same.

The Court: It has a thermostat?

Mr. Allyn: No, sir, it does not have a thermostat. I say the first Cohen patent in suit merely adds a thermostatic latch in the base member which holds the contacts together until the device is heated and then releases. Cohen's 1,944,925 does not show the thermostat.

Mr. Huxley: This, I think, was merely mentioned for clarity of description. Of course this patent, Cohen patent, was issued after the first Cohen patent, or rather the original application on which it was based, had been filed in 1932. And this patent 1,944,925 was issued in 1934. So the two applications are co-pending.

Mr. Allyn: They are overlapping.

Mr. Huxley: Overlapping. This is not a reference.

Mr. Allyn: Well, it shows knowledge of Cohen himself of this structure as early as 1929.

Mr. Huxley: Oh, yes, but that, of course, is the same man. Mr. Allyn: For purpose of information I have introduced the Ashton patent, 2,060,783, which by mistake on the part of the examiner was cited against one of the Cohen patents.

The Court: Which one of Ashton are you talking about? [fol. 219] Mr. Allyn: Ashton 2,060,783. It is cited against the first Cohen patent. But of course the filing date was altogether too late to apply to the Cohen device. Cohen's application, your Honor will see, was pending for some six years and a half in the Patent Office.

Mr. Huxley: This is offered for illustrative purposes; is

that correct?

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Mr. Allyn: And in order that the Court may know what it was that the file wrapper was talking about.

Mr. Huxley: Yes.

Mr. Allyn: If you object, I make no point of it.

Mr. Huxley: No objection, besides that, if it is distinctly

understood that it is too late to be a reference.

Mr. Allyn: The same situation in effect applies to the other Ashton patent, 2,084,966 which issued while Cohen's first patent was pending. And Cohen copied a claim out of Ashton which, however, was ultimately stricken out of the Cohen application as not being pertinent to the Cohen structure.

Mr. Huxley: That is introduced for informative purposes but not to show the state of the art.

Mr. Allyn: That is correct. I think that it is not necessary to introduce this Wolfson 2,093,116, as it was not cited, and discloses structure of the other Wolfson patent 1,980,-157. This later Wolfson claims what we call the contact in the bottom of the socket. And it is earlier than any of the patents in suit except Mead. And the plaintiff has admitted the existence of the structure in 1931, 2 and 3.

Mr. Huxley: That does not add anything to the other.

Mr. Allyn: I do not think it adds to the other, and I, therefore—

[fol. 220] Mr. Huxley: You withdraw that?

Mr. Allyn: I withdraw that from the record. I had included copies of the two Cohen patents in suit which I do not need to put in as my exhibits. They were merely there for the convenience of the Court. I think they should not, therefore, be in the file of my exhibits, the Cohen 2,117,232 and 2,140,311.

Mr. Huxley: You do, however, as I understand it, rely upon Cohen 2,117,703.

Mr. Allyn: That is correct.

Mr. Huxley: For the defense of double patenting.

Mr. Allyn: That is correct.

Mr. Huxley: So that is in for double patenting.

Mr. Allyn: That is right. 2,117,703 should remain as evidence of priority over this first Cohen patent in suit, based upon which the first Cohen patent is invalid for double patenting.

Mr. Huxley: It is the defense of double patenting that

you are urging.

Mr. Allyn: That is correct.

Mr. Allyn: It was a prior patent. If it had been a later patent it would not invalidate the claims.

Mr. Huxley: I see.

Mr. Allyn: I do not believe this Johnson patent 2,139,374 need be in this record. That was the patent that was held invalid, I believe, by Judge Holly, but is not involved in this suit.

Mr. Huxley: That is correct.

Mr. Allyn: I therefore withdraw that from my book of patents.

I think at this time, in view of the record thus far made.

I withdraw the Cohen pater 2,137,195.

Clerk Carroll: Should I make a note of that being withdrawn? [fol. 221] Mr. Allyn: That patent is withdrawn from this book of exhibits.

The Smith British Patent 285,200 is offered to show the practically concurrent work on a thermostatic cut-out or automatic cut-out for cigar lighters, concurrent with the alleged work of Mead.

Mr. Huxley: I will have to object to that.

Mr. Allyn: Just a moment, please.

Mr. Huxley: Pardon me.

Mr. Allyn: This has been mentioned several times, and I do not know. I do not believe that under the record that is in the case now, that that is necessary.

The Court: Will you withdraw British Smith?

Mr. Allyn: I withdraw that, and also the British patent to Rupps, 298,073.

Colonel Johns tells me this. This Rupps patent was cited against Cohen's patent, and therefore should remain in as showing the state of the art.

Mr. Huxley: State of art for Cohen?

Mr. Allyn: Against Cohen.

Mr. Huxley: Cohen, both patents.

Mr. Allyn: It should equally apply to both patents.

Mr. Huxley: Cohen patents.

Now the Rupps. I mean the Smith.

Mr. Allyn: Smith is out.

Mr. Huxley: Yes, that is prior to Cohen, but not prior to Mead.

The Court: It is out. Mr. Huxley: Out.

Mr. Allyn: I apparently made a mistake about that Wolfson patent.

The Court: Which Wolfson? Mr. Allyn: Wolfson 1,980,157.

[fol. 222] Colonel Johns tells me it was not cited against that second Cohen patent. Had Wolfson 1,980,157 been cited, I do not believe the Patent Office would have allowed the patent.

The Court: Which Wolfson?

Mr. Allyn: 1,980,157, was not cited against Cohen. If I said that, it is a mistake.

The Court: I thought you cited that as illustrating your structure identical with the second Cohen except for the thermal.

Mr. Allyn: That is right, sir, but Colonel Johns said I said it was cited by the examiner. If I did say that, it was a mistake. It was not cited by the examiner.

The Court: I do not think so.

Mr. Allyn: If it had been cited, the examiner would not have allowed the case. I mean if he had noticed it.

The Court: That Wolfson just came in as an illustration

of a prior-use device.

Mr. Allyn: Well, the patent issued later than Mead, but prior to Cohen 1980, issued prior to Cohen but it was not prior to Mead. That is right. It was co-pending. That is the trouble. It was co-pending with the Cohen patents, although it was filed in '31. We proved and stipulated the public use of the device prior to the filing of the Cohen applications.

That is all.

Mr. Huxley: I would like to offer in evidence as Exhibit 29A a copy of the Smith British patent 285,200, which is later than Mead but is earlier than the Cohen patents, for the purpose of showing how a thermostat could be used in a cigar lighter, but even at a later date it indicates the mis-[fol. 223] directed efforts which failed, as we say and submit, to meet the Mead combination. It is merely illustrative." I would now like to offer in evidence a stipulation which is dated September 16, 1939, in regard to certain testimony that was taken in the case at Chicago against the Sinko Tool & Manufacturing Company. That stipulation provides that the testimony there taken of Mead, Dunsmore. George W. Johnson, and Sidney Thomas Jessop, may be used in this case with the same force and effect as though directly taken here, and that the attached copies of exhibits offered in connection with this testimony, may also be used. So that I offer the testimony of these four men and also the exhibits accompanying their testimony. For the sake of simplicity, I will make a record of the exhibit. I offer as Plaintiff's Exhibit 30 for Identification, Plaintiff's Exhibit 29 of the Sinko case, also for identification, as Exhibit 30.

(Plaintiff's Exhibit 29A, Smith British Patent 285,200.)

(Exhibit 30 for Identification: Plaintiff's Exhibit 29 of the Sinko case.)

Mr. Huxley: As Plaintiff's Exhibit 31, Plaintiff's Exhibit 30 of the Sinko case.

(Plaintiff's Exhibit 31: Plaintiff's Exhibit 30 of the Sinko case.)

Mr. Huxley: As Plaintiff's Exhibit 32, Plaintiff's Exhibit

31 of the Sinko case.

(Plaintiff's Exhibit 32: Plaintiff's Exhibit 31 of the Sinko case.)

Mr. Huxley: As Plaintiff's Exhibit 33, Plaintiff's Exhibit 32 of the Sinko case.

(Plaintiff's Exhibit 33: Plaintiff's Exhibit 32 of the Sinko case.)

[fol. 224] Mr. Huxley: As Plaintiff's Exhibit 34, Plaintiff's Exhibit 34 of the Sinko case.

(Plaintiff's Exhibit 34: Plaintiff's Exhibit 34 of the Sinko case.)

Mr. Huxley: As Plaintiff's Exhibit 35, Plaintiff's Exhibit 35 of the Sinko case.

(Plaintiff's Exhibit 35: Plaintiff's Exhibit 35 of the Sinko case.)

Mr. Huxley: And as Plaintiff's Exhibit 36, Plaintiff's Exhibit 36 of the Sinko case.

(Plaintiff's Exhibit 36: Plaintiff's Exhibit 36 of the Sinko case.)

The Court: You said something about offering those for identification.

Mr. Huxley: That was one that was offered for identification but was not in evidence in the other case, and is also merely offered for identification, in this case in the same way, merely to make the testimony intelligible; that is all. It is not in evidence. It is simply marked for identification.

Mr. Allyn: Might I ask the purpose of the offering of this

exhibit or this stipulation?

Mr. Huxley: Certainly. The purpose of this is to remove any question in regard to the alleged earlier date of knowledge and invention of Copeland, which is established either in March according to the earlier Copeland patent, or April of 1927 according to the second Copeland patent. It is our position that this testimony, supplemented by other testimony which we shall now offer, carries back the date of in-

vention of Mead prior to any Copeland date that is established. So the Copeland patents become quite immaterial, that is, the date of invention is earlier as established by [fol. 225] this evidence, we submit, than Copeland. That is the purpose, on rebuttal.

Mr. Allyn: If that is the purpose, it is proper.

Mr. Huxley: And to also show that there is a certain reference here to the development of the Mead lighters, and it is offered to show that too, that is, the commercial status of the actual Mead lighter.

Mr. Allyn: Or not, as the case may be.

Mr. Huxley: The testimony is there and speaks for itself. In connection with the testimony in Chicago, there were certain physical exhibits which were also mentioned by the witnesses. One was Plaintiff's Exhibit 7 of the Sinko case. And that is an exhibit now in that case, and which is presently coming up to the Court of Appeals, and it is identical in all essential respects with Exhibit 12 in this case. The spring is on the outside here, and is on the outside there. I think the two are substantially the same.

Mr. Allyn: I think that is substantially like Exhibit 12. Mr. Byrne: We agreed to that yesterday, Mr. Allyn.

Mr. Huxley: Yes, I think we did.

Mr. Allyn: One of them might have a good lighter on it and the other might not.

Mr. Huxley: I notice one of these plugs here does not have the resistance element in place, but that is just a detail.

There is another one, which was Plaintiff's Exhibit 33 in the Sinko case, which was evidently a hand-made model, mounted on an angular stand. The coil there, the bimetallic thermostatic coil, is on the inside of the socket. So that I [fol. 226] think in all essentials, if we could agree that that is a somewhat cruder model of the construction shown in Plaintiff's Exhibit 13 in the present case—

Mr. Allyn: May I see the inside of it?

Mr. Huxley: I thought you saw it yesterday.

Mr. Allyn: Did I see it yesterday?

Mr. Byrne: They were all seen yesterday and before.

Mr. Huxley: These are all substantially the same. Of course, we will have these if the example is questioned, or anything like that, but we cannot, I am afraid, leave these in this case because they are in the other case. Is that agreeable?

Mr. Allyn: Yes.

Mr. Huxley: Exhibit 37 of the Sinko case is one of these cigar lighters mounted on a piece of wood, and the construction of this, I think, has also been examined, and as far as the cigar lighter proper is concerned, the little bimetallic coil is on the outside of the socket, similar to Plaintiff's Exhibit 12 in the present case.

Mr. Byrne: 12 or 13? Which is it?

Mr. Huxley: It is similar to 12. It is on the outside. Could you check up?

Mr. Allyn: Well, you take it apart. I would rather have

you take it apart.

Mr. Byrne: He has a screw driver over there.

Mr. Huxley: I am perfectly agreeable to have anything added to the record that counsel would like as to any difference in checking of the similarities. But it would just save time.

I call Mr. Head.

[fol. 227] ALLAN J. HEAD, called as a witness on behalf of the plaintiff in rebuttal, being first duly sworn by Clerk Carroll, testified as follows:

By Clerk Carroll:

Q. Your name and town?

Direct examination.

By Mr. Huxley:

Q. What is your full name?

A. Allan J. Head.

Q. Where do you live, Mr. Head?

A. Detroit, Michigan.

Q. What is your business?

A. I am a die and tool maker.

Q. Do you know Mr. Herbert E. Mead of Detroit, Michigan?

A. I do.

Q. Will you tell us very briefly what your connection with Mr. Mead has been and whether you were both connected at any time with the same company?

A. Well, I met him while I was with the Stewart Manufacturing Company and also Ramsteen Company and then

later I bought a part interest in the Central Stamping Company which Mr. Mead was connected with at that time.

Q. He was connected with the Central Stamping Com-

pany !

A. Yes.

Q. You bought a third interest?

A. Yes.

Q. When was that?

A. Why, that was about 1924 or 5.

Q. About 1924 or 5. And around that time, say, oh, prior to 1927, did you devote any portion of your time to the work of the Central Stamping Company?

A. Yes, evenings, Saturdays and Sundays and holidays

and any time I could get.

Q. In that connection did you come in contact with Mr. Mead?

A. Yes, worked right with him. Mr. Mead stayed and [fol. 228] worked with me during evenings and Saturdays.

Q. Is that the Mr. Mead? Do you know whether he took out a patent on a cigar lighter?

A. Yes, I know he did.

Q. No. 1,736,544?

A. I wouldn't know the number.

Q. No, but I am showing you a copy of that. Is that the Mr. Mead that you know?

A. Yes.

Q. Prior to the beginning of 1927 what products did this Central Stamping Company make in general?

Mr. Allyn: If your Honor please, may we have the dates eliminated and find out whether the witness has a memory of his own?

Mr. Huxley: Yes.

By Mr. Huxley:

Q. You testified, did you not, that you were connected with the Central Stamping Company?

A. Yes.

Q. What date was it when you went with them?

A. 1924 and 25.

Q. And 24?

A. Around in there.

Q. What was the business of that?

A. We manufactured accessories for automobiles.

Q. What, for instance?

A. Horn buttons, fender braces, steering column brace.

Q. What did Mr. Mead do in connection with that company? What was his connection?

A. Mr. Mead ran the factory.

Q. He ran the factory. These other companies you were working for, the Stewart Company and Ramsteen, where were they located?

A. They were located in the same building with the Cen-

tral Stamping Company.

Q. During what period would you say that you devoted [fol. 229] your Saturday afternoons and evenings to work in connection with the Central Stamping Company with Mr. Mead? During what period was that, roughly?

A. Well, I would say it was when I went in there as a part-

ner in 1924, I think along late in the fall of 1924.

Q. And then on to what time?

A. Well, until about 1928.

Q. What was the financial condition of the Central Stamping Company?

A. Very, very bad.

Q. You put some money in it?

A. Yes.

Q. Was there any sale made of that company at any time?

A. Yes.

Q. When?

A. Maybe—in the latter part of 1926.

Q. Who was the sale made to?

A. S. T. Jessop & Company.

Q. Prior to the time of that sale did you ever see Mr. Jessop down in Detroit in connection with the work of the Central Stamping Company?

A. Yes.

Q. These various products that were made by the Central Stamping Company, state whether or not any of them were sold to Mr. Jessop?

A. Yes.

Q. What was he, a selling agent?

A. Yes. Well, he had a warehouse in Chicago too. He stocked some of the goods.

Q. Now, when this sale was made to Mr. Jessop, did he supply some money to carry on the work of the company?

A. Oh, yes, he bought the company. He furnished the money.

Q. And then he ran it?

A. Yes.

Q. So then the company, you might say, dissolved at the end of 1926, and then whom did you work for?

A. I was still working for Mr. Ramsteen.

Q. You were still working for Mr. Ramsteen?

A. Yes. That is during the daytime.

Q. That is during the daytime. Prior to this time of the [fol. 230] sale to the Jessop Company had you ever observed Mr. Mead doing anything in connection with any work on cigar lighters?

A. Yes.

Q. Tell us what you observed and when and what it was.

Just tell us in your own words.

A. Well, I believe it was in the spring of 1926 that Mr. Mead conceived the idea of making an automatic cigar lighter, I understood with a manual action.

Mr. Allyn: If your Honor please, simply may he state what he knows, not what Mr. Mead conceived?

By Mr. Huxley:

Q. That is correct. What did Mr. Mead do?

A. He started work on this automatic cigar lighter.

The Court: When was this?

By Mr. Huxley:

Q. When was this?

A. In the spring of 1926.

Q. Was that prior to the date or after the date of the sale to the Jessop Company?

A. That was before.

Q. That was before?

A. Yes.

Q. What did Mr. Mead do in connection with that? What

did you see yourself?

A. We built some models. He built the model, several of them, different kinds. He experimented with the thermostatic metals.

Q. What did he build? Give us a description of that if

you can.

A. Well, we had a base. I imagine it was about two and one-half inches in diameter, probably one-sixteenth of an inch thick.

Q. Of metal?

A. Of steel, probably cold rolled steel. And then cover-[fol. 231] ing this was a fiber disk of diameter of the base. And then assembled with that was a bracket. And on this bracket was a sleeve, or we used it as a socket. There was a contact point on one end.

Q. Round, was it?

- A. Round and long just like a sleeve, but it had a bottom to it.
 - Q. It had a bottom to it?

A. Yes.

Q. How was that attached to this base?

A. I believe with a screw. It was so it locked. With a screw we locked it in position so that it would not tighten up on the screw, in the sleeve to rotate.

Q. The screw itself?

A. Yes.

Q. Was this sleeve you are talking about movable or stationary?

A. No, it was movable. It would rotate.

Q. Now, was there anything else carried by that base?

A. Yes. In fact both the contact points.

Q. That is, will you describe a little more what that was?

A. The ground wire was at the end of the horizontal part of the bracket. And the vertical part of the bracket held the spring, a flat piece of steel, perhaps about, oh, I would say three-sixteenths or a quarter of an inch wide.

Q. Yes.

A. And it was formed in a oval shape. One end had a "V" form.

Q. "V"1

A. Yes. And of course this was insulated from the bracket. And still the vertical part of the bracket held this spring. And then of course there were some slots, two slots, I think, in the socket. And we had what we called a knob. It was a plug really. One end held a heating element.

Q. What was that heating element? What sort of a thing

was that?

A. Well, it was a flat coil.

Q. A flat coil?

A. Yes. Made of a heating element material. I really do not know what the composition was.

Q. Yes.

A. But it was a steel flange. And then we had a fiber [fol. 232] knob. And inside of this plug held the contact point, and——-

Q. What sort of a thing was that contact point?

A. If I remember correctly about one-eighth of an inch square. It was brass and probably projected through the sleeve of a plug one-eighth of an inch.

Q. That stuck out sideways, did it, or what?

A. Yes. Then we had another little rivet or piece of brass that fitted into the opposite side of the slot.

Q. The slot of the socket?

A. Yes.

Q. Tell us, did you see this thing operate?

A. Yes.

Q. Did you operate it yourself?

A. Yes.

Q. How did it work? What did you do and what happened?

A. Well, you see we had a thermostatic coil in the

botto n.

Q. Did you have a spring? You had what?

A. We had a thermostatic coil spring in the bottom, a flat coil spring.

Q. In the bottom of the socket?

A. Yes. Of course this was fastened. One end was fastened to, I think it was a screw, to the bottom of the socket. It held the socket to the bracket or to a base. And the other side was hooked to the socket itself.

Q. Yes. When you wanted to operate it what did you do!

A. Just put the plug in. There were two sized slots in the socket. One was quite a bit larger for the contact point. And the other slot in the socket was just a trifle larger than the pin. So we used to slide it in. And when it hit bottom, turn it to the right.

Q. Then what happened?

A. It came in contact with this oval spring that was on the vertical part.

Q. That V-shaped thing?

A. Yes—on the bracket.

Q. Then what did you do?

A. Well, it was usually left there 'til it clicked off,—in the reverse direction.

[fol. 233] Q. That is, you turned it over?

A. Turned it into this 'til you could feel it stop.

Q. Then what did you do, take your hand off?

A. Take your hand away.

Q. Take your hand away. Then what happened?

A. When the heating element got to a certain heat the thermostatic metal would release the contact and it would go back to its regular position and then you took it out.

Q. Then you took it out?

A. And used it.

Q. Did you work at a bench with Mr. Mead or what? Where did you do this work?

A. Yes, on a bench.

Q. Did you make some of the parts?

A. Yes, I made some of the parts.

Q. What was your particular job? Did you turn them up on a lathe or what did you do?

A. Sometimes I made a little temporary die. I remember those little temporary dies in my experimental days.

Q. Do you remember Mr. Jessop or anyone else coming down to this plant at Detroit before this sale was made to the Jessop Company?

A. They were there several times.

Q. Did you have this thing that you have described?

A. Yes.

Q. Or not, at that time?

A. Yes, we did.

Q. Are you positive of that?

A. Absolutely.

Q. How did it work at that time? For instance, you take the handle. What was the character of that or what was it made out of, the knob on the device that you have spoken of?

A. Oh, well, probably one of our experimental knobs. Made out of a piece of fiber. Fiber rod.

Q. Fiber rod?

A. We turned it up in a lathe.

Q. Did this thing work the way you have described it?

A. Yes, it worked.

[fol. 234] Q. Did it work perfectly satisfactorily or did you have some trouble?

Mr. Allyn: Please-

A. Oh, we had plenty of trouble.

By Mr. Huxley:

Q. Plenty of trouble. What was the trouble?

A. Well, the thermostatic metal would come soft, or whatever it was, and it would not operate every time. For a while it would be all right.

Q. Yes.

A. But I imagine the heat being so close to the heating element, affected the thermostatic metal.

Q. I see.

- A. In time. And it would not click off the way it should.
- Q. Now, you remember this sale that was made to the Jessop Company. Now project your mind to a period after that sale and tell us what more was done by you and Mr. Mead in connection with this Mead lighter.

A. One thing, we had to change our thermostatic spring.

Q. In what way?

A. We took it from the inside, the bottom of the socket and put it on the outside.

Q. And put it on the outside. How did that work?

A. It seemed to work fairly good. We had very little trouble after that.

Q. Did you, for instance, change your thermostatic metal,

the supply, or anything like that?

A. Yes. I think our first metal was purchased from the Chase Valve Company that are in Detroit. And then from a representative of the Wilson Company somewhere in the east. I do not recall just where that was.

Q. You do not remember?

A. We used to have sample thermostatic metal and I think we used that. In fact I know we used that.

[fol. 235] Q. That appeared to be better?

A. It seemed to answer our purpose better.

Q. More reliable?

A. Yes.

Q. Have you looked around and been able to find any of those original models that were made at the time of the sale to the Jessop Company?

A. Yes, I have one.

Q. You say you have one?

A. Yes, I have one.

Q. I mean made prior to the time of the sale to the Jessop Company. You had one, did you?

A. I did not have one of those, I do not think. No. But I have seen them.

Q. You have seen them?

A. Yes.

Q. Where was the spring on the inside or the outside of the socket?

A. You are talking about prior to the time he purchased

the place?

Q. I am talking of prior to the time when Jessop bought the company. I am showing Exhibit 33 from the Sinko case. And will you examine, not the stand on which it is, but the main portion of this, and tell us, after examining it, how that compares, or whether you could in any way identify it in fact as having been made before or after the time of the sale to the Jessop Company. You can take the plug out if you like. Is that a hand-made or machine-made?

A. That is one of our early models, a very early model.

Q. Where is the spring located in the socket on that particular one?

A. This is not one of our-

Q. That is not the plug; is that right?

A. Yes, that was a later plug.

Q. That was a later plug, but how about the rest of it?

A. Well, as far as I can see, it is one of our early models, very early models. I think I can safely say that that will be the same thing, if it is not one—of our models—before Mr. Jessop bought the company.

Q. Before he bought the company?

A. Yes.

[fol. 236] Q. One of your hand-made models?

A. You see your coil thermostatic spring is-

Q. On the inside?

A. On the bottom of the socket.

Q. Besides that have you any models that you could find that you are sure were made prior to the time of the sale to the Jessop Company? Have you any of them? Anything besides this one I have just shown you, that you are familiar with, as something which was actually made prior to that time?

A. Well, I do not believe I have one right now.

Q. No. Have you made a search for these things?

A. Yes, I did, at home.

Q. Yes.

A. Yes, I found one home that I have home, but I do not think it was one of the very new——

Q. You found one that was given to Mr. Johnson sometime ago, did you not?

A. Yes.

Q. That was one with a nickel-plated cover, and so on?

A. Yes.

Q. After the sale to the Jessop Company was there any time at which you went to work exclusively for Jessop?

A. Yes.

Q. About when was that?

A. Well, it was-it would be about the last of May, 1928.

Q. Last of May, 1928?

A. Yes.

Q. And up to that time what had you been doing, work-

ing Sundays and evenings and so on?

A. Worked eight hours for Ramsteen and then spent the rest of the evenings and Saturdays or Sundays or holidays out at the S. T. Jessop Company.

Q. Was Mead there during all this time?

A. Yes, and most of the time he worked right along with us.

Q. He worked right along with you. What did you do in the way of developing this cigar lighter? Tell us what took place. Did you hire any die makers, for instance?

A. Yes. When it came to—when we were satisfied that [fol. 237] the cigar lighter would work, we hired die makers to come there, and of course I worked along with them to make the permanent dies.

Q. When did you hire those fellows? Do you remember!

A. Why, I imagine we started—

Q. I think you had-

A. In the fall of 1928.

Q. In the fall of 1928?

A. Yes.

Q. You had a book, did you not, where you checked that up?

A. Yes, that was in October, wasn't it?

Q. October, 1928.

A. Somewhere along in there.

Q. When you hired the die makers, did you hire them for that purpose, for making dies for this automatic cigar lighter? Is that what you hired them for?

A. Yes.

Q. And they put in all their time on that, did they?

A. Yes.

Q. They did?

A. Oh, I would not say all their time, because we had other work, and sometimes they might help out on some other little job of die or fixture or tool that they wanted made. But they spent the principal part of their time on the tooling for the cigar lighter.

Q. Tell us what was that about actually getting this thing on the market. Would vou tell us about shipments you

might have made of these devices?

A. Why, the S. T. Jessop handled that, their sales. Or Johnson, their sales manager, he handled that part of it. We made shipments to different jobbers. And Montgomery Ward.

- Q. You shipped to them direct?
- A. Yes.
- Q. Upon orders that you got from Mr. Jessop; is that correct?
 - A. Yes.
- Q. Did you, in these shipments that you made, for instance to Montgomery Ward, the commercial shipments, did you encounter any difficulties? Did you have any complaints? Did any come back?

A. Yes. Yes, there were. I believe of the first few shipments we did have some trouble. They returned them.

[fol. 238] Q. What was the trouble?

A. Well, they just did not operate just right. We did not have our thermostatic spring just—

Q. Just right?

- A. Just right. As we should have had it, but that was corrected.
 - Q. That was corrected?
 - A. Yes. And we sold one again. We sold them.
 - Q. You continued to sell Montgomery Ward?
 - A. Yes.

Q. Had repeat orders?

A. Had repeat orders all over the United States.

Q. When did you say you had what might be called the kinks out of it, so that you were shipping a product that was satisfactory to you? Along about the time you hired these?

A. I would say the latter part of 1928.

Q. Latter part of 1928?

A. Probably the middle. It is pretty hard to tell exactly.

Q. Around in 1928?

A. Yes.

Q. Did you have many returns from that time on?

A. Occasionally we would have returns. Sometimes the heating elements did not work just right. We would have to replace the heating elements.

Q. Replace the heating elements. That was a little coil,

the little igniter coil.

A. Yes. The end of the knob of the socket. I mean the plug.

Q. But were any large quantities returned or anything

of that kind?

A. Oh, no, not from any other place. We would have them returned not often, but now and then.

Q. How long did Mr. Mead continue to be associated with

you in the Jessop Company approximately?

- A. Well, I believe it was the same year of 1928. I would say September or October. Somewhere along in there. He left.
 - Q. He left?

A. Yes.

Q. You were in daily contact with him; is that right?

A. Yes.

[fol. 239] Q. Why did he leave?

A. Well, it was over a controversy over a Ford contract that we had.

Q. Ford contract for what?

A. Making shock absorber items.

Q. What happened and what was the controversy!

A. Well, Mead really got the contract.

Q. From Ford?

A. Yes. And we had gone along making them right alone, and Ford wanted to change this and that, and Mr. Mead was willing to change it, and Mr. Jessop was not, to make these changes. In a business of our size, to buy two big coin presses was out of the question, and they wanted their bolts coin-pressed, instead of lathed. We had turned them in a short-cut lathe.

Q. Did his leaving have anything to do with these cigar lighters, his leaving?

A. No. We went right on to build them, excepting the Ford work. We did that.

Q. You mean these shock absorbers?

A. Yes.

Q. After Mead went, you went right on making these cigar lighters?

A. Yes, and the rest of the products, yes.

Q. I am showing you this card. Do you recognize it?

A. Yes, I recognize that, sure.

Q. What is it?

A. It is one of the packing cartons for the Jesco Automatch, one of our first ones.

Q. One of the first ones?

A. Yes.

Q. Did you use that one before Mead left?

A. Yes.

Q. Yes, I see. That was what you put the cigar lighters into for shipment?

A. Yes.

Mr. Huxley: I offer that in evidence as Plaintiff's Exhibit 37.

(Plaintiff's Exhibit 37: Carton for Jesco Automatch Lighter.)

Mr. Allyn: May I ask the purpose of that?

Mr. Huxley: Yes, to show the general commercial development and success.

[fol. 240] Mr. Allyn: As of what date?

Mr. Huxley: Before Mr. Mead left.

Mr. Allyn: I am sorry; I could not hear what the witness said.

Mr. Huxley: He testified, Mr. Allyn, that that was the type of carton that they used before Mr. Mead left the company.

By Mr. Huxley:

Q. Now, after Mr. Mead left the company did you adopt

any other style of carton?

A. Yes, we changed quite a bit. We adopted that—I don't know what you call it—checker-trim effect on this carton and we made a darker one.

Q. I show you another carton. Do you recognize it? Tell

as what you know about it.

A. That is a later one we used.

Q. Is that the kind of carton you used in your shipment to

Montgomery Ward?

A. I would say it was. We did not make any difference in our cartons in the shipments to another customer. What we shipped to one I think we shipped to the rest of the.n—

the same thing. I don't remember whether we made any differentials.

Mr. Huxley: This carton has already been identified through the testimony of other witnesses, and a photostat of it is in the Sinko case, identified as Exhibit 35, so I will not again offer it, inasmuch as it has already been offered, except that here is the original. We have a photostat in.

I might say to your Honor as to all this other testimony that we have documentary proof of the date when the actual bill of sale took place from the Central Stamping Company to the Jessop Company. All that is established by documentary evidence.

[fol. 241] By Mr. Huxley:

- Q. Are you connected with the Casco Company in any way, the manufacturer in this suit, or the plaintiff?
 - A. No.
- Q. Have you any interest in this suit one way or the other?
 - A. No, I have not.
- Q. Now, Mr. Head, I am handing you two photostats marked "Plaintiff's Exhibit 28 for identification," and I am showing you the second page. Do you find on that any representation of the Jessop cigar lighter, this type you have been telling us about?
 - A. Yes, I would say that one there (indicating).
 - Q. You are now pointing-
 - A. In the middle column.
- Q. It is the third column from the right-hand side on the bottom, is it not?
 - A. Yes.
- Q. That you identify as the cigar lighter that you were making and shipping, correct?
 - A. Yes.

Mr. Huxley: This is offered in evidence as Plaintiff's Exhibit 28. I have the original catalog, but I take it that there is no question as to this.

Mr. Allyn: No objection.

(Plaintiff's Exhibit 28 for Identification received in evidence and marked "Plaintiff's Exhibit 28.")

By Mr. Huxley:

- Q. Now, this last spring or about in May, 1939, what was your condition? Were you well or were you ill?
 - A. In May?
 - Q. Yes.
 - A. I have been sick. I was sick since February.
 - Q. You were sick at that time?
 - A. Yes.
- Q. There was some discussion with you at that time about coming to Chicago to testify or not?
 - A. At the time of the trial I had not been out of the house.

[fol. 242] Mr. Huxley: I have here, Mr. Allyn, the complete invoices of the shipments during 1928 of the so-called Jesco automatic lighters, and I have a list of the shipments that gives all the details. I have no witness to identify this, but if you would be willing to accept it as genuine, I can give you the list, if you care to have me, so that you can know just exactly what the shipments were. The shipments of the cigar lighters are all marked with those slips, and I have here a complete list of the information there, showing the number, the person sold to, and the price at which they were sold. I did not bring a witness because I don't think it is vitally important, in view of the testimony already given, but if you would care to stipulate the exact facts, I am perfeetly willing to do so. That list, I might say, was prepared in my own office. I don't think it is particularly material. I thought that if you would like the exact information it would be right there.

Mr. Allyn: It is quite a good deal of information to absorb

in a moment.

Mr. Huxley: Think it over for an hour or so.

Mr. Allyn: I don't wish to take any more time. Are they in inverse order?

Mr. Huxley: Yes. The earlier dates are on the bottom. The first one is No. 2579, a shipment to L. F. Pierson of one eigar lighter, and so forth. You will find all the shipments to Montgomery Ward, and all the others are on there.

By Mr. Huxley:

Q. Mr. Head, I am showing you Plaintiff's Exhibit 12 in this case. Will you look at it and tell us whether that [fol. 243] represents shipments that you made on the commercial scale in 1928 or around there?

A. Yes, I would say so.

Q. That is your commercial product?

- A. That is our stamp on there, and the case is about the same, as far as I can see.
 - Q. Did you ever use one of those on your own car?

A. Yes, sir.

Q. How long did you use it?

A. I would say a year.

Q. About a year?

A. A little better than a year.

Q. When? Around 1928?

A. I would say we started in 1927, in the fall.

Q. That was when you put it on the car?

A. In 1927, yes.

Q. And you used it about how long?

A. I would say about a year.

Q. Were you using it right along?
A. Whenever I needed a light, I did.

Q. Did it work satisfactorily or not?

- A. It worked satisfactory as far as I was concerned.
- Q. Is Plaintiff's Exhibit 12 a product that you normally made commercially?

A. I would say so.

By the Court:

Q. Made at what time?

A. 1928 or 1929.

Mr. Huxley: 1928 that one.

By the Court:

Q. What was the date of the earliest model that you ever saw Mr. Mead make?

A. Well, that would be pretty hard for me to tell. I would say it would be around June or July of 1926.

By Mr. Huxley:

Q. May I ask this question, Mr. Head? Are you positive that that first model which you saw him operate was before [fol. 244] the sale to the Jessop Company?

A. Oh, yes, before I ever knew very much about the Jessop Company. I don't think I even met Mr. Jessop at that time.

The Court: What do the documents show?

Mr. Huxley: The documents show that he sold, or rather, that the sale was December, 1926.

That is all.

Cross-examination.

By Mr. Allyn:

Q. I think you said that you worked for Mr. Rhanstine.

A. Yes.

Q. Didn't he make a cordless lighter?

A. He did.

Q. Can you describe it?

A. Yes, it was a bakelite affair, and the heating element was in a plug. You pressed it into this socket and, of course, you could see when it was red-hot and you could remove it and use it. The form, I would say, of the lighter was in a kind of horseshoe-shape, and the knob that you lighted you simply put into this horseshoe shape affair.

Q. Do you know whether that had anything to do with Mr. Mead's work?

A. Really, the sample that he had in the beginning was really the beginning—give us the idea. Mr. Rhanstine wasn't in the automobile accessory line at that time; he was manufacturing radio parts.

Q. He gave you the idea of a cigar lighter?

A. This was laying around in the shop. I don't remember whether, it was in the shop, but around his place.

- Q. You stated that the original lighter that was made along about in 1926 or 1927 or 1928 had the spiral spring in the bottom of the socket?
 - A. No, it wasn't a spiral spring; it was a flat coil.
- Q. Well, mathematically that is a spiral, isn't it?
 A. No, it is not. I would not say a spiral; I would say a spiral was not like that.

[fol. 245] Q. That happens to be a helix.

- A. All right, have it that way. I don't know, but I would say it was not.
 - Q. There was a coil in the bottom of the socket?

A. Yes, a flat coil, thermostatic metal.

- Q. You afterwards changed that and put the coil on the outside?
 - A. The outside of the socket, yes.

Q. Do you remember when you did that? Was that after

he filed his application?

A. I imagine that would be along in 1927, say, May or April, I mean May or June; somewhere around in there. Maybe a little bit earlier; maybe later. I don't remember for sure.

Q. Wasn't it after he filed his application for a patent?

A. I couldn't tell you that.

Mr. Huxley: I don't think Mr. Head knows the date of that.

Mr. Allyn: Just a moment; I am testing his recollection. The Witness: I couldn't tell you that. I had very little to do with the patent part of the cigar lighter.

By Mr. Allyn:

Q. Then, it might have been later in 1927 that that spiral spring was put around the outside of the socket?

A. You mean the thermostatic metal?

Q. Yes.

A. It wouldn't have been any later than 1927. We built some of our permanent dies in the latter part of 1927, and I am sure we had it more nearly right. I won't say that either. That is not what I mean. I mean we were satisfied with the lighter before we started our permanent dies and tooling.

Q. And that, you said, was in the fall of 1928?

A. No, the fall of 1927.

[fol. 246] Q. You just said that it was the fall of 1928 to Mr. Huxley.

M1. Huxley: I think you are mis-quoting the witness.

A. No, I never said that. I might have. I might have made the mistake. I have a record to show it was along in October.

By Mr. Huxley:

Q. When did you hire the die-makers?

A. In 1927—the latter part of 1927.

Q. Do you know when the first sale of a commercial lighter was made?

A. No, I couldn't tell you. I would say it was around, oh, 1927, in the latter part, before we started the permanent dies. It might have been a little bit later.

Q. It might have been in January of 1928?

A. Yes, it could be. I think you will find that there were some sales made even before they had those invoices. We sold them. We made them with our temporary dies. We just put them out to see how the public would take to them.

Q. Well, what was the matter with those that came back

from Montgomery Ward?

- A. Oh, some of those heating elements burned out, and I think there was some trouble with the thermostatic metal.
- Q. It was quite a trick to get the proper thermostatic metal, wasn't it?
 - A. I agree with you.
- Q. Your business was not a large business at that time, I take it?
 - A. Oh, no, we were very small.
 - Q. So an order of 150 lighters was quite an order?
 - A. That was a wonderful order, I will tell you that.
- Q. This exhibit 33 in the case of The Automatic De-[fol. 247] vices Corporation against the Sinko Tool and Manufacturing Company was shown to you by Mr. Huxley, was it not?
 - A. You mean a few minutes ago?
 - Q. Yes.
 - A. Oh, yes, sure.
 - Q. Did you say when that was made?
- A. That is one of our very early models. I think that was made probably in the latter part of 1926. That is my guess.
 - Q. Who mounted it?
 - A. Mead did. I didn't mount it.
- Q. That is the way it was mounted when you saw it at an early date?
- A. Oh, I don't think so. We probably had models that we were working on a loard. When we made these it was really late in 1926 or the early part of 1927. We modeled some out of boards about that square (indicating) and this is one of our early models. I couldn't tell you exactly.
- Q. It may have been put together later by Mead on that mounting?
 - A. I don't quite understand.
- Q. Was it mounted when you saw it in the early days as it is now?

A. Oh, no, this lighter is mounted on an escutcheon plate on this, whatever you would call it—an angle piece of coldrolled steel.

Q. You mean that that escutcheon plate wasn't on there at that time?

A. Yes, it could be. That escutcheon plate was very likely made when we made the stand it sets in. May I see that again? I know that we had a few of them made by hand. We spun these cases by hand. We had a difficult time getting the flange straight. This is one of the very early models. You can see that the flange is cut and you couldn't get it straight. We made it over a wooden mandrel and lathe.

Q. Look at that knob and that plug and say whether you really think that it was made prior to your commer-

cial production in 1927 or 1928.

A. No, our first knobs were made—we had just an arrow, [fol. 248] as I remember. I think the arrow went practically the whole diameter of the knob, and in this arrow we put a white ink in it.

Q. That is not one of the early knobs?

A. No, this is not. This is a later one—one of the late knobs—very late.

Q. You notice the name of the Jesco Company on that plate?

A. Yes.

Q. It must have been put on afterward?

A. Oh, that could be, yes, because we experimented. That was one job to get that—

Q. Decalcomania?

A. Yes.

Q. After you got into commercial production in 1927 or 1928?

A. Yes.

Mr. Huxley: I have some photographs here which I would like to offer in evidence in this case, photographs of Plaintiff's Exhibit 33 in the Sinko case, as Plaintiff's Exhibit 38.

The Court: May I ask the purpose of it? The witness has admitted that the knob was not made then and that the base plate was not made then.

Mr. Huxley: That is right, but it is to show, as far as we can, what the witness has been talking about, that is all.

Mr. Allyn: I have no objection to that. It may be useful.

By the Court:

Q. In which company was it that you had a third interest?

A. The Central Stamping Company.

Q. And Mead was a part owner in that company?

A. Yes.

Q. And he used the company's time and materials to develop this lighter?

A. No, sir, that light was developed in the Central Stamp-

ing Company.

[fol. 249] Q. I didn't understand you. What company

did you have an interest in?

A. The Central Stamping Company, and Mead also had an interest, but he was working there full time, putting his full time in with the Central Stamping Company.

Q. While he was working there on full time he developed

this lighter?

A. Yes.

Q. Didn't you feel-

A. It was our company.

- Q. Didn't you feel that the company had an interest in the lighter?
 - A. The Central Stamping Company?

Q. Yes.

A. Yes.

Q. Did you ever suggest to Mead that he ought to have it patented?

A. I don't think I did. I don't remember ever doing

that.

- Q. Do you remember anything being said about patenting it?
- A. I think that patent talk was after the S. T. Jessop Company had bought the Central Stamping Company.
- Q. Did Mead ever give the Central Stamping Company any papers to show that they owned the invention?

A. I don't know of any.

- Q. The Central Stamping Company was a partnership, was it not?
- A. Until I bought in there, and then they made it a corporation.

- Q. What other owners were there in the Central Stamping Company?
 - A. Mr. Moyers, Glenn Moyers.
 - Q. Did he ever invent an electric switch?
 - A. Not that , know of.
- Q. How do you explain the fact that you say this model was first made and the invention developed in 1926, and yet nothing appears to have been done about patenting the invention until after that company had sold out to Jessop, a year later?
- A. Well, I don't know; I couldn't explain that. We had no money to get a patent. It costs quite a bit of money [fol. 250] and we were putting our time—I wasn't getting paid for my time outright. I would have if it had been a success. I was gambling my time with theirs. I couldn't give you any real satisfactory answer outside of that as to why we didn't talk of having it patented or why we didn't have it patented in the beginning. I really don't know.

Mr. Huxley: May I explain what it was, as shown by this other testimony? The company was sold to Jessop. Jessop came down there to consider it, as shown by the other evidence. He considered the cigar lighter, bought the company out at the end of December, 1926. They went ahead with the development then after the Central Stamping Company had been bought out by Jessop. The patent was then applied for at Jessop's request and was assigned to either Jessop or the Jessop Company—I have forgotten which—and the whole chain of title is given here. But it was Jessop who bought the Central Stamping Company and who was the immediate cause of having the patent applied for. He was the man who had the money.

The Court: It is apparent on the record. I was inquiring why for over a year this invention has not been patented.

Mr. Allyn: The testimony elicited in the Sinko case shows-

The Court: I will read it when I come to it.

We will take our afternoon recess here.

(There was a short recess.)

[fol. 251] ALLAN J. HEAD, called as a witness in behalf of the plaintiff, in rebuttal, resumed the stand and testified further as follows:

Cross-examination (Continued).

By Mr. Allyn:

- Q. Mr. Head, you said that you had had considerable trouble with the thermostatic metal and later got a type that suited you better?
 - A. Yes.

Q. From Wilson, I think you said.

- A. I think it was from Wilson. Mr. Herman was the representative. I remember he was the man who called on us.
- Q. That was the material you used in the spring on the outside of the socket?
- A. Yes, I believe it was, because we didn't continue purchasing the Chase Valve Company material. We got most of our purchases from this Wilson Company.

Q. Now, you said that you had an oval spring?

- A. Contact, yes.
- Q. Contact?
- A. Yes.
- Q. What was that made out of?
- A. I think that was a cold-rolled steel.
- Q. It wasn't thermostatic metal?
- A. You mean in the ones we sold commercially?
- Q. Yes.
- A. I doubt it. I think the thermostatic metal we did try did not work satisfactory to us and we did not continue. I am very sure that our later models were all hard rolled cold steel.
 - Q. In the latch?
 - A. Yes, in the latch, or the contact.
 - Q. The contact metal?
 - A. Yes, it is the same thing.
 - Q. That is what you refer to as your production model?
 - A. Yes.
 - Q. Which was in the latter part of 1927?
 - A. Yes.
- Q. Do you remember what kind of thermostatic metal you used in the coil spring?
 - A. You mean the temperature high or low?

[fol. 252] Q. Yes.

- A. No, I do not. I did not know at the time which metal was the high or the low-temperature. No, I couldn't say. I don't know.
- Q. At that time you didn't know which kind to use, did you?
 - A. No.
 - Q. Now, can you read the drawing?
 - A. I think so.
- Q. Look at this picture of the Mead patent, Exhibit 11. I call your attention to this form of device shown in Figure 21. Do you see that coil spring 105?
 - A. I see it from here.
- Q. Did you make the coil spring like that? Out of thermostatic metal?
- A. I really don't know anything about that spring. I am sorry, but I really don't recall it. We tried flat springs and we may have tried those coil spiral springs. I really couldn't tell you about that.
- Q. You don't remember seeing one like this 105 in this Figure 21?
 - A. I couldn't say that I had.
- Q. Do you see these two members marked 54¹ and 53, one in this drawing shown in orange (color) and the other blue? Do you remember any such thing as that in this early lighter?
- A. You mean this (indicating)? This spring going around there, an oval spring? We then changed it. We had it this way and then we had it all in one and changed it. We put our contact—it was inserted with a piece of fiber in there. I mean it was insulated with a piece of fiber in there. Where is the base? Is that the base (indicating)?
 - A. Yes, from that bracket part.
- Q. Well, in looking at this figure 21, the member marked No. 53——
 - A. 21.
 - Q. This is Figure 21 (indicating).
 - A. All right.
 - Q. Member 531
 - A. Yes.
 - Q. It is shown in blue on this chart, is that right?
 - A. Yes.
 - Q. It is shown in blue color?
 - A. Blue or green; I can't see from here.

[fol. 253] Q. Is that what you call the latch (indicating)?

A. Yes, the contact.

Q. The contact?

A. Yes.

Q. And that, you say, was made of ordinary steel or spring steel?

A. Not spring steel. I think it was cold rolled high car-

bon-cold-rolled.

Q. But not bimetal?

A. Not in the later models, no. We did try that in some of our experimental work. We tried bimetal up there.

Q. It did not work so well?

A. No.

Q. No. 54¹ on this Figure, you say, at one time was made integral with 53?

A. Yes.

Q. And afterwards made separate?

A. I believe afterward it was made in one piece, wasn't it! I wouldn't be positive.

Q. I am asking you.

A. As I remember—I haven't seen the model for some time. We had a contact that came through here. This fiber in here—we had little prongs, I remember, that came out on the side and clamped onto this fiber and the fiber on this connection 54¹.

Q. 5419

A. What is this connection (indicating)?

Q. That is 53.

A. I don't see it here where that would be. Where would be your positive action? This is it probably, isn't it?

Q. I am asking you.

A. Well, it was fastened to this latch. That made the contact with the inside of this plug here or this contact point with the heating element (indicating).

Q. Now, sheet one of this Mead patent, exhibit 9, shows

a different kind of cigar lighter, doesn't it?

Mr. Huxley: You mean a different construction from sheet 2.

Mr. Allyn: Let him testify.

A. Yes. Some difference there, I believe.

[fol. 254] By Mr. Allyn:

Q. This has a spiral spring 47 in the base of the socket, has it not?

A. I would imagine that is where it would be, a spring of that nature. There is the part that went into the head of the screw. This is the part that hooked onto your socket (indicating).

Q. That is the one that you say you took out and put on

the outside of the socket later?

A. Yes, thermostatic metal. That was the spring we took out from the inside of the socket—in the bottom of the socket—and put it on the outside of the socket.

Q. And all those that you sold commercially had that spiral spring 47 on the outside of the socket, did they not?

A. I would say they did. There might have been a few in the very beginning that went out with the thermostatic metal in the bottom of the socket, but I don't believe we have any record of it. I don't remember.

Q. Did you make any tools for the commercial production of a socket having a large base like that shown in Figure 15 of that patent? It would be quite a trick to make tools for that, wouldn't it?

A. Yes, it would. You would have to use a divided die

for that, I imagine.

Q. You didn't have any divided die, did you?

A. Not that I remember. I wouldn't say we did. That could have been spun that way. No, it could not, either. I doubt it. I wouldn't know about that at all. I don't recollect that.

Q. You never made any commercial lighter that way, did you?

A. I am pretty sure we did not; not that I know of.

Q. Do you know whether you used the same kind of thermostatic metal in this spiral 47 that you did in the latch member or contact when you did use thermostatic metal in the contact?

A. I would say we did, because I think at that time our [fol. 255] source of supply was the Chase Valve Company, and I think they had only one kind of metal, and that might

have been an experimental part.

We probably found it was not right. Now, since I recall a little bit I think part of this was thermostatic metal backed up by a cold-rolled piece. We did make some of this. That was simply to reinforce this contact (indicating).

Mr. Allyn: I think that is all.

Redirect examination.

By Mr. Huxley:

Q. Mr. Head, before you were shown these patent drawings just now during cross examination had you made any examination of them?

A. No, I had not.

Mr. Huxley: That is all.

Mr. Huxley: Now, Mr. Allyn, as I mentioned we have the invoices of the Jessop Company in Chicago for the year 1928. They happened to have them available and I have a list here showing the shipments of these automatic lighters. Would you care to stipulate that this list is as shown in the invoice and that those shipments were made?

Mr. Allyn: I don't object to the list, but I am still somewhat in the dark to know what the construction was that was shipped. I think that Mr. Head's testimony has been very enlightening in some respects, but it does not tell us what the structure was that was sold.

Mr. Huxley: I think we have shown that by these exhibits, and the things are identified in the invoices as the Jesco automatch cigar lighter, and on the shipments for Montgomery Ward, for example, the catalog number is given.

[fol. 256] Mr. Allyn: I have no objection to your using the list in lieu of the book of sales slips, but I don't admit that structure shown in the patent.

Mr. Huxley: The heading of this is "Shipments of Jesco Automatch as Indicated by Invoices of S. T. Jessop Company, Incorporated." That is all I am asking. If you would like to stipulate it, all right.

Mr. Allyn: I have no objection to it in that form without admitting what the structure was.

Mr. Huxley: Very well.

I introduce this list as Plaintiff's Exhibit 39.

(Plaintiff's Exhibit 39: List headed "Shipments of Jesco Automatch as Indicated by Invoices of S. T. Jessop Company, Incorporated.")

I should like to recall Mr. Head for one more question.

ALLAN J. HEAD, recalled as a witness in behalf of the plaintiff, testified as follows:

Direct examination.

By Mr. Huxley:

Q. Mr. Head, I am showing you Plaintiff's Exhibit 12. Will you state whether or not, as nearly as you can remember, that represents chipments that were made to Montgomery Ward during the year 1928?

A. I would say it would.

Mr. Allyn: I am sorry; I didn't hear that question.

Mr. Huxley: I asked him whether this represented shipments that were made to Montgomery Ward during the year 1928.

[fol. 257] Mr. Allyn: What does the word "represented" mean?

The Witness: I would say these were the same kind of lighter, exactly the same principle and all.

By Mr. Huxley:

Q. This Plaintiff's Exhibit 12, the standard commercial lighter?

A. Yes, I would say it is.

Cross-examination.

By Mr. Allyn:

Q. In this Plaintiff's Exhibit 12, do you know what the construction of the latch, or contact, is?

A. I imagine the last cres—the one I remember now was a piece of cold rolled steel—hard-tempered cold rolled steel in an oval shape.

Q. All in one piece? You are speaking from memory now. Are you sure about it?

Mr. Huxley: In other words, you don't want to show him the sample, but you want to test his memory?

Mr. Allyn: That is it exactly.

A. I would say all in one piece.

Mr. Allyn: That is all. Mr. Huxley: That is all. [fol. 258] ARTHUR A. JOHNSON, recalled as a witness in behalf of the plaintiff, in rebuttal, testified as follows:

Direct examination.

By Mr. Byrne:

- Q. I call your attention to Exhibit 11, which is sheet 2 of the Mead patent in suit. While Mr. Wolfson was on the witness stand, and with that drawing before him, he made reference to a keyhole of some nature. Did you understand what Mr. Wolfson had to say?
 - A. I understood what he said.
- Q Will you please explain whether or not there is a keyhole construction there?
- A. No, there is no keyhole construction there through which the contact 75 may pass. I explained in my direct testimony that the knob is large in diameter—is as large in radius as the radius of the pin, and therefore the pin 75 can be withdrawn in any arcuate position of the knob.

It is different with the commercial device such as Exhibit 12. That has a keyhole slot, but in the drawing there is no such thing. You can pull it out at any angular position it happens to be in without danger of short-circuiting.

Q. Will you please turn to the patent of Copeland, No. 1,844,206. Will you tell me whether or not you heard Mr. Wolfson's testimony with regard to this patent?

A. I did.

- Q. Do you agree with his testimony as to the construction and operation of the device shown in that patent?
 - A. I do not.
- Q. Will you point out the particular or particulars with which you disagree with Mr. Wolfson, basing your remarks with respect to the showing, of course, of this Copeland patent?
- A. The igniting resistance coil 14—the reference numeral [fol. 259] is in the middle of the tube in Figure 2—is mounted on a base of refractory material. Refractory material is material that reflects the light away from the thing producing the heat, and that isolates that part of the tube which contains the igniting resistance coil from the part of the tube which contains the bimetallic strip 24. Besides that the very operation of the Copeland device requires a circulation of air across the face of the igniting

coil, and for that purpose there is a hole shown diagonally away from the reference numeral 4 in Figure 2. That permits the air to come in, and there is a hole on the opposite side.

Q. Will you please look at Figure 6, Mr. Johnson, and see if the holes to which you referred are not identified there by references 18 and 19?

A. Yes, they are identified by reference in Figure 6, but the holes are also in Figure 2, which is the construction we

have been talking about.

The hole corresponding to 19 would permit the heat to escape. Now, some of the heat would go up through the tube unless the tube was completely filled by a large cigar, but if you had a cigarette in there, for instance, as shown in dotted lines, a good deal of the heat would go up through that tube. In view of that, in my opinion the bimetal contact member 22 is controlled by the resistance which is wound around it, quite independently—

The Court: Just a minute. Did you say 22?

Mr. Byrne: 24.

The Court: 22 is a pivot.

A. Yes, sir, I should have said 24. That bimetallic strip 24 is controlled solely by the windings around it and quite independently of the heat coming from the resistance coil

14, which is the working resistance.

[fol. 260] I recall Mr. Wolfson saying that with regard to the device coming to incandescence that you could light the cigar or cigarette before it became incandescent. That is a fact. You don't have to have the resistance glowing white hot if you leave the cigar or cigarette in contact with the resistance long enough, but the point here is that the resistance 14, which is used to light the cigar or cigarette in Copeland, should be brought to incandescence as rapidly as possible, in order to get as much heat as you can, and should be left on. That is left in that glowing condition a sufficient length of time to light the most moist, probably, cigar that you would come across.

Of course, that time would be controlled solely by the heat generated by the coil of wire around the bimetallic strip 24.

There was a device something like this Copeland device put on the market except for the thermostatic feature, and I have a sample of it here. I could demonstrate, if you care to see it, how quickly this resistance comes to incandescence and that it can remain in incandescent condition and should for the period of time required to light the cigar or cigarette.

By Mr. Byrne:

Q. Does this device that you have in your hand have a trade-mark or trade name?

A. Yes, this is called the Self Lighter, and it has a resistance wire in the base, which quickly comes to incandescence and which in this device you allow to remain incandescent until you take the cigar or cigarette off the device.

Q. About how long have you had this device that you have

in your hand?

A. Oh, I have had this particular device about a year, I think.

Q. Do you know by whom it was made?

A. I understand it was made by a Mr. Diack outside of [fol. 261] Detroit, somewhere. He submitted it to us. He wanted us to take a license under his series of patents, including this very Copeland patent.

Q. By that you mean number 1,844,206?

A. That is right.

Mr. Byrne: It will take but a minute to give this demonstration, and I should appreciate it if you would allow us to do it.

The Court: What significance has it?

Mr. Byrne: It is a device made according to this Copeland patent, we understand.

The Court: There is no evidence of it?

Mr. Byrne: But it is without a thermostat. When they came to make it they did not make it with a thermostat, this particular Copeland thing.

The Court: Very well, if there is no objection.

Mr. Allyn: How does that become pertinent, your Honor? The Court: I don't know.

Mr. Byrne: I don't think you are very much taken by surprise. You are licensed under this Copeland patent. You know all about this device. That is, your client does.

Mr. Allyn: I don't know. That has nothing to do with the

point involved.

By Mr. Byrne:

Q. Have you tested the device that you have in your hand?

A. Yes, I put this device across the battery and the resistance wire became incandescent as fast as the resistance wire used to become incandescent in the old reel-type lighter. In the reel-type lighter and in this type of lighter you brought the device to incandescence and then you held it in engagement with the cigar or cigarette while the current [fol. 262] was still going through the resistance. In other words, the resistance continued to work during the lighting of the cigar or cigarette. In the wireless type of lighter the resistance is electrically dead when you are using it.

Mr. Byrne: I will ask that that device be marked for identification.

(Plaintiff's Exhibit 40 for Identification: Self Lighter made by Mr. Diack, of Detroit.)

The Witness: The reason that I mention that characteristic of this self-type lighter is that if the bimetal strip 24 in the Copeland patent 1,844,206—If this bimetal strip 24 was so selected that immediately upon the resistance coil 14 coming to incandescence the circuit was open, then there wouldn't be time for the cigar or cigarette to be lighted; so in the Copeland device it is a pure timing device, and the operation of the bimetallic strip has nothing to do with the surface conditions of the igniting resistance 14.

By Mr. Byrne:

Q. Now, Mr. Johnson, will you please turn to the drawing of this same Copeland patent and tell me what that part is which is marked 15?

A. That is a refractory base—ceramic base, I presume. He describes it as a refractory base on which the resistance coil that lights the cigar is supported.

Q. Would that have anything to do with retarding heat from the coil 24 with respect to the ignition end of it?

A. Yes, it would reflect back toward the cigar and away from the chamber which contains the bimetallic strip. Outside of the holes through which the wires pass, except at the top, you have no circulation of air in there at all.

[fol. 263] Q. Is there any problem in this Copeland patent No. 1,844,206 of storing heat in an ignition coil as in a wireless lighter?

A. No, the problem of storing heat does not present itself here, because you have the resistance connected to the source

of current while you are using it, and there is no need of storing it. As a matter of fact, the idea is to get the heat on the cigar and try not to store it anywhere else.

Q. Mr. Johnson, some questions were asked of Mr. Wolfson which pointed out the outline of a cigarette and the outline of a cigar in Figure 2 of this Copeland patent about which we are speaking, and the inquiry was made as to whether or not the presence of the cigar or the cigarette would retard the passage of air—the draft up through the hole or opening into which the cigar or cigarette is placed. What have you to say as to that?

A. Of course if the cigar fitted the hole it would stop all draft coming up through this chimney, but you would still

have the transverse draft go under the deflector 21.

Again getting back to that deflector: If there is a draft or if there is any breeze coming, as for instance from a cowl vent, it would be caught by that 21 and would be fed across the end of the cigar, which is in engagement with the resistance wire, and that would be a forced draft, but the normal thermal chimney effect would be the other way.

Q. How is that chimney effect produced the other way,

that is, up through the opening in this device?

A. If you had a large cigar on there so as to stop the draft in a direction, let us say, northwest from this drawing, then the draft would go northeast through the two apertures.

Q. Is that brought about by the fact that you might have some heat on one side and cold air on the other?

A. That is the only way you would get the draft ther-[fol. 264] mally. I explained that. If you have any wind blowing in there, the deflector 21 will supply the draft.

Q. If I have a partially-smoked cigar, and desire to attempt to relight it with a device of this Copeland patent No. 1,844,206, could I very well push it down by the end that had been chewed down?

A. You could if it was your cigar; I wouldn't want to. It depends how close you smoke them. The point is, to get a real light after having smoked or possibly chewed the end of the cigar, you would have to push it down into the hole, and then you might not be able to get it out. This resistance 14 of Copeland does not perform the functions of a match in lighting a cigar or a cigarette, and the resistance in a

wireless cigar lighter is intended to perform that function as safely as possible.

Q. When you take it out and away from its circuit after

it has been heated, does it take the place of a match?

A. Yes, except that it is not so dangerous as a match.

Q. In your testimony a short while ago, you made mention of a dry cigarette or cigar—I don't know which you took for an illustration—and you made some reference to heating it in the device of the Copeland patent 1,844,206. Would the same condition exist if I had a fresh cigar or

cigarette?

A. Well, this Copeland device should be able to light the dry cigar or a fresh one that has been in the humidor, because in any design of device you would make the time interval so great by proportioning the metal and the resistance of the bimetal that you would have long enough time to light the cigar under adverse conditions, and there is nothing critical. You could keep it on perhaps a minute with this Copeland type lighter without any difficulty. You would have the difficulty there, however, of ascertaining when your cigar was lighted. You might learn that from experience if you kept smoking the same brand of cigar from your own humidor, but if you extend the period of [fol. 265] time during which Copeland operates, so as to take in the whole range from, we will say, a dry cigarette to a fresh, damp eigar, then there is nothing to indicate to you when your cigar or cigarette is ready to be taken out and used. You may see the smoke coming out, and that would be a pretty good indication.

Q. In the normal lighting of a cigar or a cigarette in a device such as this Copeland patent, if you left it in there unduly long, quite an ember could be found on the end of

your eigar, could it not?

A. Oh, yes. It would not matter a great deal. The radiation there could be so great—the dissipation of heat could be so great as not to do any serious damage.

Q. Now, Mr. Johnson, back in the time of Mead, in 1926 and 1927, were you an active worker in the art? Did you

classify yourself as such?

A. Well, I was constantly in contact with the developments of the aut-mobile cigar lighter, and I was striving to improve the cigar lighter, particularly the wireless type of lighter, which was just then making some impression on the art.

Q. Mr. Johnson, will you tell me whether or not on or about August 24, 1927, which is the date of the application for the Mead patent, there was any patent or publication of which you were aware which disclosed the use of a thermostat in an electric cigar lighter for any purpose whatsoever?

A. There was nothing, to my knowledge.

Q. At the same time, say at or prior to August 24, 1927, did you know of any cigar lighter or cigar lighter disclosure in a patent in which the current supply circuit was closed

and kept closed, other than by manual control?

A. I know of no construction in a cigar lighter where you could close the circuit and leave it alone—take your finger off, and that statement is true, so far as my knowledge is concerned, whether it is a wireless lighter or a real lighter or just a plain cigar-counter lighter.

[fol. 266] Q. When you took your hand off, the circuit was

immediately broken?

A. Yes, it depended upon manual control to keep the circuit energized, that is, to keep it energized while you used it.

Q. Prior to August 24, 1927, the date of the Mead patent, did you know of any disclosure in a patent or publication of a latching of an ignition unit in energized position for any purpose?

A. In a cigar lighter?

Q. Yes.

A. No.

Mr. Allyn: What has this got to do with whether this gentleman in 1927 knew of the existence---

Mr. Byrne: The next question will tell, Mr. Allyn. I don't mean to be evasive. I will state the reason if your Honor desires it. Mr. Johnson was a worker in the art—a skilled worker in the art at that time—and I want to ask his opinion as to whether or not at that time if he had been shown the disclosure of this Copeland patent 1,844,206, it would have disclosed to him the idea such as is embodied in the Mead patent.

Mr. Allyn: I certainly object to that. I think I was excluded from asking a similar question of Mr. Wolfson.

Mr. Byrne: I think not.

Mr. Allyn: As to whether it would require any skill.

The Court: Will you restate your question?

Mr. Byrne: May I put it in the form of a question?

The Court: Yes.

By Mr. Byrne:

Q. Mr. Johnson, in the light of your personal experience and the experience which you have related, assuming that [fol. 267] you had the skill of a model maker or a worker in the art, such as you have, if disclosure of this Copeland patent 1,844,206 had been brought to your attention, would it have suggested to you that a wireless lighter might be advantageously made with a thermostatic control?

Mr. Allyn: I certainly object to that.

The Court: I think that is a backhanded way of asking the witness to make the distinction between mechanical skill and invention.

Mr. Byrne: Very well, your Honor. Of course, ordinarily you can ask for an opinion, and I have asked it as a matter of opinion.

The Court: I don't think you are entitled to ask for an

opinion on the ultimate issue.

Mr. Byrne: Very well.

By Mr. Byrne:

Q. Mr. Johnson, I think you testified the bimetallic switch of Copeland is not controlled by the heat of the working resistance, did you not?

A. Yes, I did.

Q. Have you considered the Smith British patent No. 285,200 and the Rupps British patent No. 298,073 with reference to an automatic wireless eigar lighter such as the Mead patent in suit, and if so, will you point out the constructions, showing whether or not they embody the invention of the Mead patent, so far as you know?

Mr. Allyn: I didn't introduce that Smith British patent.
Mr. Byrne: I beg your pardon. Not the Smith British patent, but the Rupps British patent.

[fol. 268] Mr. Allyn: I thought you mentioned it in the question.

Mr. Byrne: I mentioned both, because the Rupps was there too.

Mr. Huxley: We introduced the Smith British patent.

A. Yes, I have. The Smith British patent is a wireless cigar lighter. It has a base portion and an igniting unit, generally indicated by the reference numeral 25. This is an

open-faced lighter. The igniting unit is in a recess in the front face. The heating element is in the open or front face

of the igniting unit.

The igniting unit has a flange 24, and the holding device or base 15 has a horse-shoe-shaped grip or socket, the part being marked 23, and that receives the flange 24 and holds the igniting unit in normal position. One side of the circuit is closed through the shell or the flange 23 on the holder engaging the flange 24 on the igniter, while the other side of the circuit is closed by a contact 27 on the igniter engaging a yielding spring 28 on the holding device.

Q. When it is desired to use the cigar lighter, the operator presses a switch lever 19. He does not touch the igniter in this case at all; he just pushes in on the switch lever 19. That closes a circuit between the contacts 18 and 29, and then the current flows through the respective parts to the

current supply terminal.

In this circuit, on the way between the igniter and the current supply terminals there is a thermostatic device which receives its heat from the heating element or by the current flowing through, and opens and closes the contacts 8 and 9 as the device heats up and cools off. Meanwhile you hold this lever 19 in position. If the driver is pushing in on the lever 19 and forgets that he has his hand on it, [fol. 269] the circuit opens automatically between the contacts 8 and 9, and then if the igniting unit cools off, the contacts close again, and it will come up to heat. Of course, that would not happen very often, because if you want a light, you will pay attention to it, and when you use the igniting unit-and when you see the igniting unit glowing you release your hand from the switch. There is nothing in this patent to releasably hold the igniting unit in energized position—that is, in energized position until the resistance coil is hot enough for use or, in fact, to hold anvthing.

You have to hold the circuit closed by hand yourself. It is not an automatic lighter of the full character disclosed by Mead.

The Rupps patent is rather an impractical device. In this Figure 1 the main body portion marked "E" is the igniting unit. The bottom portion is the igniting unit and the top part, marked "A", along with the contact fingers b—c constitutes the holder. The igniting resistance is marked "K".

This is an inverted lighter. These springs, contacts b and c snap into a recess within the body "E" and in that way the igniting unit would hold the device together. When you want to use the cigar lighter you rotate the igniting body "E" until the contacts b and c, respectively, engage contacts F and G, on the igniting unit. These contacts F and G ultimately lead to the resistance coil, but between the ends of the contacts and the resistance coil there is a switch member G which normally engages a member O. However, when the igniting unit reaches the proper temperature for use, a capsule very much like that coffee pot that Mr. Allyn spoke about-it is marked "M" in Rupps-expands and moves the contact "G" out of engagement with the resistance coil, so that the circuit is automatically opened. [fol. 270] Nothing happens to the igniting unit, however. It stays in that position. There is no spring for rotating it, and if you don't take it off and use it at that time, the resistance K will cool off and the circuit will again be closed.

That is a hunting type of thermostat. That merely maintains a desired temperature. There is no automatic operation except the mere maintaining of a temperature. There is nothing to eject. After the user puts the device on the dash back, he must be careful to see that the contacts B and C are not in engagement with the contacts F and G; other-

wise he will drain his battery.

Mr. Byrne: I offer in evidence the enlarged drawing of the British Smith patent referred to by the witness, and ask that it be marked Plaintiff's Exhibit 41.

(Plaintiff's Exhibit 41: Enlarged drawing of British Smith patent.)

Mr. Allyn: I don't understand the purpose of this exhibit.

Mr. Byrne: I will also offer in evidence the enlarged drawing of the British Rupps patent No. 298,073, and ask that it be marked Exhibit 42.

(Plaintiff's Exhibit 42: Enlarged drawing of British Rupps patent No. 298,073.)

Mr. Byrne: If your Honor please, the enlargements are those from which Mr. Johnson testified, and those two patents are, in point of fact, in here.

The Court: I know that they are in. Mr. Allyn does not understand the purpose of their being in, and I do not, either.

Mr. Byrne: It is just this: They are in there. It is like the end at a football game. He is out wide and he may be [fol. 271] dangerous. We don't know why he is there. Similarly, we don't know what arguments may be raised, and I would like to have that within the confines of the record.

The Court: What are you citing it for?

Mr. Byrne: They do show in about the period that Mr. Mead made his invention.

The Court: This is long after Mead.

Mr. Byrne: In the period after Mead, that is correct. The misdirected efforts of the inventors in the art, showing that they did not perceive, even at that time, what Mead accomplished in his patent. That is one point we wish to make.

By Mr. Byrne:

- Q. Mr. Johnson, were you acquainted with Mr. Copeland, who is the patentee of this patent, 1,844,206, about which we referred to?
 - A. Yes, I know him.
- Q. I show you a patent granted on the application of Francis C. Copeland, No. 1,919,159, which was granted on an application filed August 27, 1924, three cays after the date of filing of the application for the Mead patent in suit. Do you know whether or not that patent was one which was taken out by Mr. Copeland of the patent about which we have been talking, No. 1,844,206?
 - A. It is.
- Q. Is there a thermostatic feature in this patent that I just tendered you?
 - A. Yes.
 - Q. No. 1,919,159?
 - A. There is no thermostatic feature.

Mr. Byrne: I offer in evidence a copy of the Copeland patent 1,919,159, which has just been identified by the witness.

Mr. Allyn: I object to that as not being pertinent or material.

The Court: Can I see it?

[fol. 272] Mr. Byrne: The purpose of the offer of this patent is to show that at the time of the filing of it, which was three days after the filing of the Mead patent, Mr. Copeland, who is also patentee of the patent No. 1,844,206, upon which some reliance appears to have been placed, did not apparently know about the use of a thermostatic lighter which was controlled by the heat of the resistance coil.

Mr. Allyn: He might have applied for a flying machine.

The Court: It shows a thermostatic control in his first application. The omission in the later one does not obliterate his earlier knowledge, does it?

Mr. Byrne: No.

The Court: I don't see your point.

Mr. Byrne: It may seem far-fetched, but if Copeland in his patent No. 1,844,206 had appreciated this matter of thermostatic control he undoubtedly, in our opinion, would have embodied it in this patent which you have in your hand and which I have just referred to the witness.

The Court: How can you say that? Your own evidence shows that simultaneously there is a substantial use for both the automatic and the non-automatic devices. Because he files one application for an automatic device, what significance can a subsequent application for the other style have?

Mr. Allyn: May I add this? The plaintiffs own that patent. That is one of the patents they sued Sinko on last

spring.

Mr. Byrne: That does not add anything to the point that I am attempting to raise here with respect to it. I don't know back there how long Copeland might have had the application for that particular patent in the grist being pre-[fol. 273] pared, but it was very curious to me to observe that three days after the filing of the Mead patent he was still working on the old order of things. That was the reason I attempted to project it. I think it is material, but how material our minds, of course, greatly differ on. It really goes along with the efforts such as in the Rupps and Smith British patents.

The Court: It is an entirely novel matter to me, after so

much prior art has come in, to put this in.

Mr. Allyn: I don't see why he should be compelled to invent thermostatic lighters.

The Court: Is this prior or subsequent to Mead?

Mr. Byrne: That particular patent?

The Court: It is three days later.

Mr. Byrne: Filed three days later than the Mead application.

The Court: Is it offered on Mead or on Copeland?

Mr. Byrne: I offer it as against this Copeland patent about which we have been heretofore talking.

The Court: Copeland is not in issue. For what issue in

this case do you make this out?

Mr. Byrne: This other Copeland patent about which we have talked so much appears to have been something of an issue in this case, and this other effort of Copeland, himself, the same patentee, intended to show what he was doing about the time of the filing of the Mead application. Time is getting on and I will withdraw it rather than have any more time taken with it.

The Court: It really does not seem to me very useful. I am a little puzzled at the offer, and don't want to inadvertently make a technical error.

[fol. 274] Mr. Byrne: For the time being, may I mark it for identification?

The Court: Mark it for identification, Mr. Carroll.

(Plaintiff's Exhibit 43 for Identification: Copeland patent No. 1,919,159.)

By Mr. Byrne:

- Q. Mr. Johnson, will you refer to the second Cohen patent in suit? Are any tongues illustrated in that patent to provide for a frictional engagement between the plug and the socket?
- A. No, there are no tongues shown on the sleeve 38 which would provide that frictional—yielding frictional contact that you speak of.

Q. Is that an expedient which was well-known in the

cigar lighter at that time?

- A. It was at that time, and the same thing is shown in the Wolfson patent. Wolfson had these tongues lanced out from the side of the receptacle or socket or plug or wherever you want to have them.
- Q. Will you turn to your notes, so that it will be intelligible a little later, and tell me what Wolfson patent you refer to?
- A. I am referring to the one that was discussed here this morning, 1,980,157. In Figure 2, the second piece from the

left, we see the sleeve 3, which has these lanced tongues 19 that are provided for just that purpose of yieldingly holding the igniter and holding device together against inadvertent separation when the spring 17 was released.

Q. It was common practice at that time?

A. At that time, yes.

Q. Now, will you please turn to the Denhard patent 1,143,572, about which some testimony has been given by Mr. Wolfson. Will you please state with respect to that patent whether the problem that was worked upon by Den-[fol. 275] hard is the same as any problem in the wireless

cigar lighter, and if not, will you please state why?

A. No, the problem is not the same at all, because in Denhard and in these electrical appliances, you want to control the temperature of the appliance itself. This being a sadiron, the thing to do is to control the temperature of the sole plate or base of the iron. It does not make a particle of difference whether the resistance wire that is heating the iron is higher or lower in temperature, and in almost every instance, in order that the direct radiation of the resistance coil will not affect the thermostatic member, there is some kind of heat wall or insulation provided, such as the mica plate 6 in the Denhard patent. The only thing in common between Denhard and the wireless cigar lighter is that in each of them they have an automatic arrangement for opening the circuit, as a safety device; not in regulating the temperature of the resistance wire at all.

Q. Now, Mr. Johnson, will you please refer to Andrews patent No. 1,925,852. Can you tell from the disclosure of that patent where the resistance is located with reference to

the bimetallic strip?

A. No. In this patent the position of the resistance coil is not illustrated. Figure 4, which shows it diagrammatically, does not give any reference numeral. In Figure 1, where there is part of the iron broken away, it is clear that the bimetallic strip 15 is quite a ways up from the base of the iron, and I would assume that this is one of those irons where the resistance wire is built in the sole plate or directly over the sole plate.

Q. Was there a problem before with respect to which Andrews addresed himself in that patent common to the wire-

less cigar lighter art?

A. No, because here again he is measuring the temperature of the iron. He is not as close to getting the actual tem[fol. 276] perature control of the sole plate as Denhard, because his bimetallic strip is secured way up in the iron itself. Nevertheless, it is to prevent overheating of the iron.

Q. Tell me what you mean by the term, "sole plate."

A. It is the usual term in sadirons. It means "bottom plate," or the sole—s-o-l-e, of the iron.

Q. Now, Mr. Johnson, will ; ou please turn to Metzger 1,622,334, and tell me whether or not the outer part—the

upper part in Figure 1 is adapted to be rotated.

A. Yes. If you put the igniter of Metzger onto the holding device, and want to cause the circuit to be closed, you push in on the igniting unit and then rotate the igniting unit until the locating pins 32, shown in Figure 3, the tiny little pins down in there, come into notches in the igniter, and at that time the contacts 2 and 4 on the igniter engage the contact 17 on the holder. The circuit is closed by rotating the igniting unit. There are two ways of doing it. You can either rotate it to close the circuit or push it in, or you can do as Smith did, put a separate button on it.

Q. Will you please turn to 1,838,363, the patent of Copeland. How close is the thermostat with reference to the heating element in the device portrayed in that Copeland

patent?

A. Well, it is very difficult to understand the exact location of the thermostat in this Copeland patent. The time switch—that is what I call it; it is not really a thermostat is shown in Figure 10, and the button for it is marked 21, but it is not shown in any other figure, and from the specification I gather that you would utilize that mechanism shown in Figure 10 in lieu of the handle 21 on the slide in Figure 7. That slide allows one cigarette after the other to drop down, and closes the circuit by manual control in Figure 7, and I take it from the specifications that you simply substitute this button arrangement of Figure 10 for that push [fol. 277] slide 21 in Figure 7. That would take the bimetallic strip of the time control completely away from the igniting unit coil, which, in this case, is marked with the reference numeral 27 in Figure 6, and is located at the bottom of an inclined shelf.

Q. Is there any feature about any of these patents that have been introduced here that I failed in my hurry to ask you about here, Mr. Johnson, that you think might be of help in the disposition of the issue?

A. No. The only thing I would say was in connection with that Copeland patent which was marked for identification, the 1,919,159. Purpose which was marked for identification, made clear that that was a wireless type lighter as distinguished from the self lighter type of the Copeland patent 1,844,206.

Mr. Byrne: Thank you for that. I did not ask that question. I overlooked it.

Cross-examination.

By Mr. Allyn:

Q. Are the points just discussed by you the only ones in the testimony of Mr. Wolfson with which you seriously differ?

A. Oh, I couldn't say, Mr. Allyn. I just made notes of a few points that were striking, and I spoke to Mr. Byrne about them. I will try to think a mon.ent if you want me to try and recall what he testified to.

Q. You referred to the Copeland patent as having a refractory member 15 which supports the heater or igniter

coil 14. Is that right?

A. Yes, sir.

Q. Now, do you know the difference between a refractory

material and a heat-reflecting material?

A. Oh, yes. I know that refractory material very often reflects heat. I would say a reflecting material such as a sheet of mica might not serve the usual purposes of refractory materials.

[fol. 278] Q. But a refractory material sometimes gets

very hot, does it not?

A. Oh, yes. It is supposed to stand heat.

Q. It is supposed to stand it without damage?

A That is right.

Q. That is the only thing it means?

A. No. I think it is also used for reflection of heat, too. I think refractory ovens—

Q. Was there anything in the Copeland patent about re-

flecting heat from it?

A. No.

Q. Then we can assume, I think, that refractory meant it would withstand the temperature of the device is that correct?

Mr. Byrne: I object to that, if your Honor please. We might assume what is stated in the patent on that.

May I have an answer to that, sir!

The Court: Is there objection to the question?

Mr. Byrne: I withdraw it. Go ahead.

The Witness: I have forgotten the question.

The Court: Read the question.

(The reporter read as follows):

"Q. Then we can assume, I think, that refractory meant it would withstand the temperature of the device; is that correct?"

A. That is right.

By Mr. Allyn:

Q. Do you notice that that member 15 is pivoted at 22?

A. Yes, sir.

Q. And you notice that there is a space around the edge of the member 15?

A. Yes, sir.

[fol. 279] Q. Then there could be convection of heat through that space, could there not?

A. There could be, but I doubt whether it would be.

Q. It would be small. That is your point, I take it.

A. Yes, because the whole chamber there is enclosed on the bottom, except for the holes that the wires go through, and I think that is only a diagrammatic showing.

Q. Anything that requires it to be imperforate?

A. No.

- Q. I understood you to say that the bimetallic member 24 had nothing to do with the condition of the coil 14; is that correct?
 - A. Nothing to do with it?

Q. Yes. I think that is the language you used.

- A. No. When it moves it opens the circuit of the coil 14.
- Q. Then if you said what I just quoted, you were in error?
- A. Well, maybe I didn't understand your question. But when you say, "nothing to do," I don't know what you mean.
- Q. I wrote it down. I thought I had it correct, but perhaps I didn't. Now, the problem of storing heat in an igniter coil was not new with Mead, was it?

A. No, sir.

Q. I think you said that the coil was not controlled by

the temperature of the thermostat; is that correct?

A. The resistance coil 14—well, I say the same thing I did before. The thermostat—thermostatic bar 24 opens the circuit to the coil, but it is not the heat from the coil 14 which does the controlling.

Q. But the temperature of both goes up together, does it not?

A. No, sir. I would say absolutely not. The thing wouldn't work if you did it that way.

Q. Did they go in opposite directions, the temperature?

A. No, they go up. One goes up and while the other is going up—when you say "together," I assumed you meant at the same rate of advance.

[fol. 280] Q. No, I mean they rise at the same time.

A. At the same time, yes.

- Q. When a cigar or cigarette is placed against a cold coil of resistance wire and current is turned on, the tobacco will be gradually brought up to an igniting temperature, will it not?
 - A. That is correct.
- Q. And when the tobacco is sufficiently heated, it will ignite whether the coil is red hot, white hot, or only black hot?
- A. Black hot? I do not know what that is. But I think I stated it did not have to be incandescent.

Q. That is what I meant.

A. But it took a long time to light a cigarette if it was not incandescent.

Q. Now, those British patents both show cordless lighters, don't they?

A. Yes, sir.

Q. They both show automatic circuit-breakers, don't they?

A. Yes, sir, stated as you stated it.

Q. You referred to Wolfson 1,980,157 as showing a disclosure of spring tongues 19 for holding the plug in or on the socket. Is that right?

A. Yes, sir.

Q. Now, they have to be designed to withstand the conditions to which the device is suggested, do they not?

A. I should think so.

Q. I beg pardon?

A. I should think so.

Q. Did I understand you to say that in a cigar lighter you did not want to control the temperature of the ignition coil?

A. No.

Q. Then you do want to control the temperature?

A. Of the ignition coil?

Q. Yes.

A. Oh, yes. That is what you really want to control.

Q. In Andrews, I think you said there was no illustration of the heater element. Isn't the strip 14 referred to the heater element or part of the heater circuit? (Pause.) I will withdraw that question.

A. Yes-pardon me.

Mr. Allyn: Are you through?

Mr. Byrne: Yes.

[fol. 281] The Court: I think you had better put it in.

Mr. Huxley: I will offer that again, whichever way is agreeable to you, your Honor, but I would like to have your Honor consider Judge Holly's decision and the findings.

The Court: It is all in the record.

Mr. Huxley: Yes, it is all in the record, the whole thing. So I will offer now Plaintiff's Exhibit 7, the record in the Automatic against Sinko case.

Mr. Allyn: I again object to the record being burdened with that. It does not seem to me that it is pertinent.

The Court: I think if anything that may strengthen your case, Colonel; that is to say, under the law of comity I have got to give proper consideration to Judge Holly's opinion. Of course, I could notice that, whether it were in evidence or not. If I proceed merely on the basis of opinion and there is nothing else in the record, I do not see how you can be in any position to distinguish the case. I will receive the record, and I will say frankly that I propose to read thoughtfully his decision. And if the defendants think that the decision is inapplicable here because of substantial differences in the record, I think it is up to the defendant to point to the record to show where those differences are.

Mr. Allyn: Doesn't your Honor think that the things which were considered at the final argument by the Court are just exactly as important as the record itself?

The Court: Aren't they in here?

Mr. Huxley: Yes, they are all here.

Mr. Allyn: You do not understand me. The matters which were considered in the briefs by the Court at the final argument.

Mr. Huxley: I think the record is the thing, not briefs of counsel.

Mr. Allyn: It is a very particular point I have in mind. [fol. 282] Mr. Huxley: It is what evidence was before the Court.

Mr. Allyn: In this case, the Morris patent was submitted in the answer. And there was not a thing said about the Morris patent in the argument. Now, that is a very important point.

Mr. Huxley: And it was not introduced in evidence and

the copy is not in here.

Mr. Allyn: Morris is not in there.

Mr. Huxley: No, the copy of the patent is not, because they did not evidently consider it sufficiently pertinent to put it in, although they did plead it in the answer. The exact facts show here. I will offer Plaintiff's Exhibit 7.

The Court: I think I will admit it for the limited purpose

stated.

(Plaintiff's Exhibit 7 for Identification marked Plaintiff's Exhibit 7 in evidence.)

Mr. Huxley: We rest.

Mr. Allyn: If your Honor please, I find one exhibit that I intended to put in was marked for identification but not received in evidence, and that is a drawing which I think has not been disputed, showing one of the forms of the Mead device not shown in the patent. It was marked for identification "Defendant's Exhibit C." I would like to have that marked in evidence.

The Court: I do not remember about that. Is there objection?

Mr. Huxley: No, sir.

The Court: All right. Let it come in.

(Defendant's Exhibit C for Identification marked Defendant's Exhibit C in evidence.)

Mr. Huxley: I certainly appreciate your Honor's—
Mr. Allyn: I think that Exhibit N was also received only for identification. That was discussed.

The Court: What is that?

[fol. 233] Mr. Huxley: That I objected to.

Mr. Allyn: You objected to the device which we had to show.

Mr. Huxley: I also objected to the drawings for the same reason as being a pure matter of argument.

Mr. Allyn: Then we can use it in our brief.

The Court: Very well.

Mr. Huxley: What is your Honor's pleasure about that?

The Court: Is the record closed? Mr. Huxley: The record is closed.

The Court: Now that the record is closed, do you each

feel satisfied to rely on the briefs you submitted?

Mr. Huxley: I think we could, probably. We might be able to save your Honor's time and I think we could probably bring the more pertinent points by argument, oral argument, before your Honor at your convenience sometime, if you would like that, or supplemental briefs.

Mr. Allyn: I feel that same way. There are a number of

points.

The Court: We are all agreed that after what we have been through today this is no time for oral arguments.

[fol. 284] DISTRICT COURT OF THE UNITED STATES, DISTRICT OF CONNECTICUT

Civil Action, Docket No. 97

THE AUTOMATIC DEVICES CORPORATION, Plaintiff,

VS.

THE CUNO ENGINEERING CORPORATION, Defendant

STIPULATION

It is hereby stipulated, by and between the attorneys for the parties to the above entitled action, that the attached copies of the testimony of Herbert E. Mead, Adam John Dunsmore, George W. Johnson and Sidney Thomas Jessop and also the attached copies of exhibits offered in connection with the testimony of said parties, which said testimony of said parties and exhibits comprised part of the proceedings on the trial of the action brought by plaintiff against Sinko Tool and Manufacturing Company in the District Court of the United States for the Northern District of Illinois, Eastern Division, in Equity, No. 16,188, may be offered and used in this action with the same force and effect as though the testimony of said parties was duly taken in this action and the said exhibits offered in connection therewith, subject to correction if error be made to appear and subject to any objection by defendant as if the said testimony had been taken in this action.

Dated, Sept. 26, 1939.

James T. Kline, George F. Smyth, Attorneys for Plaintiff. Clarence W. Bronson, Attorney for Defendant.

R. S. Allyn, of Counsel for Defendant. Thomas J. Byrne, of Counsel for Plaintiff.

[fol. 285] IN DISTRICT COURT OF THE UNITED STATES FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

In Equity, No. 16,188

THE AUTOMATIC DEVICES CORPORATION, Plaintiff,

VS.

SINKO TOOL AND MANUFACTURING COMPANY, Defendant

Proceedings had and testimony taken before the Honorable William H. Holly, one of the judges of said court, in his court room in the United States Post Office Building, at Chicago, Illinois, commencing on Monday, March 20, 1939, at 3:00 o'clock p. m.

Present: Henry M. Huxley, Esquire, and Thomas J. Byrne, Esquire, representing the plaintiff; Russell Wiles, Esquire, Bernard A. Schroeder, Esquire, and George A. Chritton, Esquire, representing the defendant.

Whereupon the following proceedings were had:

Thereupon the plaintiff, further to maintain the issues on its behalf introduced the following evidence, to wit: [fol. 286] Herbert E. Mead, called as a witness on behalf of the plaintiff, having been first duly sworn, testified in rebuttal as follows:

Direct examination:

By Mr. Byrne:

- Q. Will you please state your full name, Mr. Mead?
- A. Herbert E. Mead.
- Q. Where do you reside?
- A. Detroit.
- Q. How old are you?
- A. Forty-six.
- Q. Will you state the nature of the business in which you are engaged at this time?
- A. I am, at the present time, works manager for Bowen Products Corporation, of Detroit.
 - Q. At Detroit?
 - A. That is right.
- Q. What is the nature of the business of Bowen Products Corporation?
- A. Lubricating devices and commercial stampings, pressed metal.
- Q. Are you the patentee of one of the patents in suit here, No. 1,736,544? I hand you a copy of that patent so that you may have the number in mind to which I referred.
 - A. Yes, I am the patentee.
- Q. Where were you located at the time that you made the invention of your patent here in suit?
 - A. We had a little plant at 2152 East Larned, Detroit.
- Q. What was the name under which the business was carried on, as you say, at 2152 Larned Street, in Detroit?
- A. Well, it was first known as the Central Stamping Company, and afterwards became the S. T. Jessop Company.
- Q. So at one time it was the Central Stamping Company?
 - A. Yes, sir.
- Q. And later on it was the S. T. Jessop Company; is that the fact?
 - A. That is right.
- [fol. 287] Q. Can you tell me approximately when you made the invention of your patent here in suit?

Mr. Wiles: That is objected to as asking for a conclusion.

The Court: What he claims is his invention.

Mr. Wiles: I don't mean that. He should state what he did and not when he made his invention.

The Court: All right.

By Mr. Byrne:

Q. You stated that you are the inventor of the patent in suit?

A. That is right.

Q. You signed the application papers for a patent thereon, did you not?

A. Yes, sir.

Q. Approximately when did you make the device which is shown in the patent here in suit?

A. You mean the first models?

Q. Yes.

- A. I would say it was in the spring of 1926, somewhere around there.
- Q. I hand you a paper and will ask you, please to read it and state whether or not the handwriting thereon is your handwriting, and when you put that handwriting thereon?

A. That is my handwriting.

Q. Do you know when you put that on?

A. 1927, I signed it.

Q. On what date in 1927?

A. August 8th.

Q. All of the handwriting on this paper that I have tendered to you is in your handwriting?

A. That is right.

Q. That is your signature thereon?

A. That is right.

Q. And the date on which you made that is what?

A. August 8, 1927.

Q. That date is also in your handwriting?

A. It is.

Q. When was it put on, please?

A. It was put on at this date here.

[fol. 288] Q. By "this date" you mean when?

A. August 8th.

- Q. What year?
- A. 1927.

Q. Now, Mr. Mead, tell me, after having read this paper to which I have brought your attention, whether or not the matters stated therein in your handwriting refresh your recollection in any manner with respect to the matter of your patent here involved, as to doing any of the things stated therein.

Mr. Wiles: If the Court please, I object to it in that form. He should exhaust his recollection first.

The Court: I think so.

Mr. Byrne: I agree with your Honor. Your Honor, we should have objected to their taking a shovel to expedite matters on the other side and testifying themselves instead of letting their witnesses do it.

Q. Will you please go on in your own way and tell me, as nearly as you can remember, when you made the device of the patent in suit, and what you did about making up a model?

A. Leading up to the model?

Mr. Byrne: That is right.

A. We were manufacturing a line of automobile accessories, horn buttons principally, and Mr. Jessup became financially interested in the company. I mentioned the fact that I had, among other products that I wanted to manufacture, a cigar lighter that would automatically turn off when the proper heat was reached. He asked me just exactly what it was and I outlined to him the features and he said, "Well, let's get busy and make up a model and get it patented," so I said, "All right." I believe that was in the winter, I believe it was in January or February, 1926, [fol. 289] I know it was awful cold and our old shop did not have very good heating facilities, and I had to work on it myself at nights and on Sundays because I had to take care of the maintenance during the day. It was just a small shop and my first model was a very crude affair. Unfortunately, the parts have been destroyed, but I do remember the testing device I made was still used when I left the company for testing finished lighters. It consisted of a sheet metal coupled with an ammeter with a clock and a six-volt storage battery on the bench.

And, of course, the first model I had to make the core of fiber, and that was adequate for a few tests, but it soon charred and burned up, and after I was satisfied that the

model was practical I purchased some porcelain cores and started to put it out on a production basis.

Q. Did you make any sketches during the early stages of

your work?

A. I did for my own information, yes.

Q. Do you know what became of those sketches?

A. I don't know what became of them, no. I don't have any in my possession.

Q. Have you been able to locate them?

A. No, I have not.

- Q. Who, do you know, besides Mr. Jessop had knowledge of your work and was told about it, who besides Mr. Jessop was told about it?
- A. Well, Mr. Head who happened to be my partner at that time, and Mr. Dunsmore handled the sales and Mr. Johnson, who was Mr. Jessop's partner.

Q. Do you know Mr. Head's first name?

A. Allen J., I believe.

Q. And do you know Mr. Johnson's first name?

A. Lynn.

Q. Mr. Lynn Johnson?

A. That's right.

Q. Did you show one of these devices to the parties to [fol. 290] whom you have referred, Mr. Jessop, Mr. Johnson and Mr. Head?

A. I did.

Q. Where were you when you showed that device to the

gentlemen named?

A. Well, of course, Mr. Head and Mr. Dunsmore were with me there at the plant and watching the progress as we went along.

Q. Did you give Mr. Dunsmore's first name?

A. His initials are A. J. I don't know his first name. They called him Jack.

Q. And all this up to now transpired at the plant at 2153 East Larned Street, Detroit, is that it?

A. Yes.

Q. You made up a model which you said had a fiber bushing, did you not?

A. That's right.

Q. Will you look on the patent here in suit, your patent, and point out to me the part thereon which corresponds to that part which you say was made of fiber?

Mr. Wiles: I object to that. There is no proof that is the structure of this thing. He made something in 1926 he says.

Mr. Byrne: I can't give way to the light of the gentleman on the other side. I asked if there is a part that corresponds to it on that drawing.

The Court: I think I shall let him answer this question.

A. It was this part, the core, as I stated.

By Mr. Byrne:

Q. When you are pointing to this core you are referring to Fig. 11 on your patent drawing, is that it?

A. That's right.

Q. Can you describe, please, the device which you made up at Detroit at the early time when you were with the Central Stamping Company?

A. Can I describe it? [fol. 291] Q. Yes.

A. Well, I believe I can, the fundamentals of it anyhow. It was a round fiber base. The metal parts that held the contact point, I filed them up and bent them up in a vise, and the socket that holds the core also, then the contacts were fastened and made of bar stock. I made that on the lathe as well as the contact cup that holds the resistance wire, and the socket that the knob went into was also made of bar stock turned on the lathe. We went down to the dime store, I believe, and found some stock Bakelite knobs, and I turned them on the lathe and on the bench, and it was a very crude looking affair, and the first ones I did not even put a case over the outside until I had gotten where I wanted in the way of mechanical movement.

Q. Will you be good enough to describe the contacts and

the plug in your device?

A. The contacts from the heating element do you mean?

Q. That's right.

- A. If I remember correctly the resistance wire was fastened to the outer shell, and I had a screw going down through the center, fastened to the other end of the resistance metal which drew it into a little square plug, one-eighth of an inch square, in the center of the core, and that in turn contacted the phosphor bronze button on the outside.
- Q. Will you please state how the circuit was closed and how you operated the device, moved it in and off position?

- A. This one-eighth inch square plug was turned to an angle and it engaged into a V-shaped slot in the contact point as you revolved it to the right, and when the element reached the proper degree of heat it strengthened the coil in the bottom of the socket and the heat generated and reflected from that, lessened the tension on the outside contact, and the other coil on the bottom strengthened and pulled it off the latch.
- [fol. 292] Q. What was the coil made of?
 - A. Thermostatic metal or bimetal.

Q. Bimetal. Now, Mr. Mead, will you please look at the two sheets of drawings in your patent and tell me whether or not the device which you made up at that time was generally the same as shown in the drawings of that patent as nearly as you can recall it?

A. As near as I can recall, yes. I know I experimented with the core on the outside of the socket as well as inside because I had considerable difficulty with the coils not being uniform, and I thought that the low temperature metal was the reason for that and I purchased some high temperature metal from the Chase Valve Company in Detroit. They had not been in that business so very long right at that time, but were making the product for a device of their own, as I understand.

Q. Is that the same firm that was mentioned here this morning when a young gentleman came on the stand and testified about the uses that bimetal product can be put to?

A. That's right.

Q. So you have known of that concern for a considerable period of time, is that it?

A. Oh, yes.

Q. What became of that first model which you made and

which you said had that fiber bushing?

A. I would not know. When I left the company it was there in a box with a lot of other stuff, and I just don't know what became of it.

Q. Tell me, please, about when did you leave the company, meaning the Central Stamping Company?

A. Well, it was known as the Jessop Company at that

time.

Q. Yes.

A. It was in the fall of 1928 because I went with Bowen Products in June of 1929.

Mr. Byrne: I ask that this paper be marked for identification Plaintiff's Exhibit 29.

(Said paper was so marked.)

[fol. 293] Q. The paper that I called to your attention a short while ago, and which is signed by you and which is dated August 9, 1927, has at the top, does it not, the name Cromwell, Greist & Warden?

A. That's right.

Mr. Byrne: And you gentlemen on the other side will concede with me that they are patent counsel engaged in the practice here in Chicago?

Mr. Wiles: Oh, yes. They are a well known Chicago firm. Mr. Byrne: Yes, and have been for a long period of time? Mr. Wiles: Yes.

By Mr. Byrne:

Q. Now, do you know the occasion for making out this paper, Exhibit 29 for identification?

A. Yes. Mr. Jessep brought that down to Detroit with

him on one of his trips.

Q. Now, will you please read this paper with me and state whether the statements contained therein, those that were filled in by you and which are in your handwriting refresh your recollection now as to the statements contained therein. First, on this sheet, Exhibit 29 for identification—

Mr. Wiles: If the Court please, I still say that is utterly incompetent. Here is a self-serving declaration not admissible by itself at all by any possibility.

The Court: You have not exhausted the recollection of

the witness?

Mr. Byrne: I believe so.

The Court: If this merely corroborates what he has specified it is not admissible. If it is something he does not [fol. 294] recall, and he has testified to all he can remember——

Mr. Byrne: Well, I asked him about when he made the

statements. This is merely corroboration.

The Court: That is merely corroboration of his statement, for that purpose it is not admissible. If he had forgotten and could use it to refresh his recollection he might testify, but as long as he has testified to the same thing this is not admissible.

By Mr. Byrne:

Q. Can you tell me about when you made the first drawings of your invention, Mr. Mead?

A. The first drawings?

Q. Yes, or sketches, whatever they were.

A. It was in the early part of 1926.

Q. And can you tell me the nature of those drawings?

A. They were merely working sketches that I made up for my own purpose.

Q. As you worked on things mechanical did you make up sketches so that you would have them as a guide?

A. Oh, yes. That was absolutely necessary.

Q. Can you tell me about when your invention was disclosed to others? When you told anybody about it. When did you tell others about it?

A. I told Mr. Dunsmore and Mr. Head-

Mr. Wiles: I object to that form. He has to state—— The Court: I thought he had testified to conversations with Mr. Jessop.

Mr. Byrne: Yes.

The Court: And if that was the time of the disclosure, and if you want to date it, is that it?

[fol. 295] By Mr. Byrne:

Q. Can you tell me about the time you had your talk with Mr. Jessop, Mr. Johnson and Mr. Head about your invention when you told them about it?

A. Well, it was in the early, I would say around January

of 1926.

Q. Yes. Now, Mr. Mead, you made up, you said, a model of your device by hand?

A. That's right.

Q. And that had fiber bushing in it, didn't it?

A. That's right.

Q. And that bushing you said-what happened to that?

A. Well, it charred and deteriorated.

Q. Do you know where that model or device is that you made up by hand and which had that fiber bushing?

A. I have not the slightest idea.

Q. Do you know about when you made that device?

A. That device was made in the year of—either made in the latter part of 1926 or the first part of 1927. I know it was cold weather when I was working on it, I know that.

Q. Well, now, at about what time was the business of the Central Stamping Company taken over by Mr. Jessop?

A. Well, that's quite a long and involved story.

Q. Can you give me the approximate time?

A. I can. He was financially interested in our company before he actually took the business over.

Q. Yes.

A. To the extent of financing us for tools and fixtures on various items that we were manufacturing for him.

Q. Yes.

A. And it was some time in 1927 that my partner, Mr. Dunsmore, advised Mr. Jessop that we could no longer carry on, so he suggested that he would purchase the assets of the company if we would stay on and run it. That was in 1927, the year of 1927.

Q. That's your recollection of it?

A. That's right.

[fol. 296] Q. Well, were any of your other devices made up after that time?

A. After what time?

Q. After the first model.

A. The lighter?

Q. Yes.

A. Oh, yes, yes, a number of them.

Q. You personally made up others after that time?

A. Oh, yes.

Q. Did you ultimately get into the manufacture of the device?

A. Yes, we did.

Q. Can you give me some indication of about the time when you got into manufacture?

A. I think it was the latter part of 1927.

Q. And at that time Mr. Jessop was in charge of the business, is that the fact?

A. That's right.

Q. And that manufacture was carried on at the plant that had formerly been occupied by the Central Stamping Company, is that right?

A. Correct.

Q. And it was then being carried on by the Jessop concern?

A. That's right.

Q. Who had charge of the sales of the device which you then made up for the market, that is to say, were they sold from Detroit?

A. We manufactured in Detroit only and shipped them to Chicago and maintained a warehouse here, and all sales were made at the Chicago office.

Q. And they were made by whom, if you please?

A. They were made by S. T. Jessop Company.

Q. I tender to you a paper, and will you please examine it and state whether or not you can identify it?

A. Yes. That is a trust mortgage.

Q. What is it, please?

A. A trust mortgage. Mr. Landy, I believe, was trustee under the mortgage.

Q. Were you familiar with the transaction which is covered by that paper which you have in your hand?

A. Yes, I was.

Q. You were interested in the Central Stamping Company at that time as a partner only?

A. Yes, that's right.

[fol. 297] Q. And did you know about the transaction?

A. I did.

Q. And what is represented by the paper which you have in your hand?

A. It is a trust mortgage. Mr. Landy was appointed trustee.

Q. For Central Stamping Company?

A. For Central Stamping Company, to administer their affairs, and I believe they decided on a sale, a trust mortgage sale.

Q. What is the date of that document, if it has a date?

A. January 14, 1927.

Q. Is there a date above that date?

A. The 27th of December. Oh, the 27th of December, 1926.

Q. The date of that paper is December 27, 1926?

A. Yes.

Q. Did you know of the transaction which culminated in this paper that I tender to you?

A. Yes.

Mr. Byrne: I ask this paper be marked for identification Plaintiff's Exhibit 30.

(Said paper was marked for identification.)

Q. Now, can you tell me by reference to this Exhibit 30 for identification, which you stated is dated December 27, 1926, whether or not you made your model, the one that is not now findable, before or after that date?

A. That's a working model which was made right after

this date.

Q. Right after that date?
A. Right after this date.

Q. And do you know about how long after that?

A. I would say within three months.

Q. Had you been working on parts of it before this date of December 27, 1926?

A. Oh, yes.

Q. And on your sketches?

- A. Well, I could not do much because I had to do it in my spare time.
- Q. Maybe I misunderstood. How about your first crude model of it, the one that was replaced by the porcelain part [fol. 298] which had the fiber bushing on, was that the one made after this date, December 27, 1926?

A. It was made shortly after that date.

Q. I am tendering to you five sheets which contain written matter, and some sketches, and will ask you if you will examine them and state whether or not you can identify them.

A. Yes.

Q. Tell me, please, who did the writing which is contained thereon?

A. It is my handwriting.

Q. Please look at all of them.

A. These are my sketches. I don't know whose this is, in whose handwriting that is.

Q. You call my attention to the fact that a sheet on pink paper, on which two figures appear, are not in your handwriting?

A. Yes.

Q. I have withdrawn those.

A. This is mine. Yes, this is the description that I gave Mr. Jessop of the various details of the lighter for the patent attorney's information.

Q. And do you know about when you prepared the data

which is contained on these six sheets?

A. I don't recall the exact date.

Q. Can you tell me approximately?

A. I imagine it was in 1927.

Q. Before the application was filed, do you suppose?

A. I imagine it must have been. That was for the patent

attorney's information.

Q. And according to your best information now this data was prepared in the summer of 1927 before the application for patent was filed?

A. That's right.

Mr. Wiles: It has a date on it, has it not?

A. I think not.

Mr. Wiles: It is dated repeatedly. [fol. 299] Mr. Byrnes: No, it is not.

Mr. Wiles: Two of them have a stamped date of August

7, 1927, on them.

The Court: Even though they bear dates I think the witness can testify to the actual date.

Mr. Wiles: Oh, yes.

The Court: Any date might be put on them.

Mr. Byrne: I offer in evidence the five sheets which the witness has testified contain descriptive matter and some sketches which he made in the summer of 1927, and ask that they be marked Plaintiff's Exhibit 31.

The Court: They may be admitted.

(The exhibit was so marked.)

By Mr. Byrne:

Q. Now, Mr. Mead, I think you testified that shortly after December 27, 1926, you made your first full sized model of your device, is that right?

A. That's right.

Q. Now, will you please turn to this paper to which we have referred, which is signed by you August 9, 1927, and to the statement contained therein in response to the question: "Was a full sized model made and if so, when?" and a date appears thereon April 30, 1926. Does that tend to refresh your recollection as to when you made your first model of this device?

Mr. Wiles: It seems to me that's objectionable and entirely improper. The witness when examined here before stated this work was done within three months following

the date of this sale, which was December 27, 1926, which would put it along to April, 1927.

The Court: Is not that the date?

[fol. 300] Mr. Huxley: This was written in 1927.

The Witness: It has been a long time ago and I have been away from the company and in fact away from that line of work for ten years.

Mr. Huxley: It seems to me it is perfectly proper to let the witness refresh his recollection from a paper written

at that time.

The Court: Sometimes a witness is refreshed as to a date, and some writing may refresh his recollection as to the date.

Mr. Huxley: As to the true date.

Mr. Wiles: At the time it was made it was wholly said-

serving, and long after.

The Court: The document is not admissible, but the witness' attention may be called to the document he has executed and made at a time nearer when his recollection might be better.

Mr. Huxley: That's all we ask.

A. I had forgotten about this until the last few months.

Mr. Byrne: Will you read my question, please?

(The question was read as follows: "Now, will you please turn to this paper to which we have referred, which is signed by you August 9, 1927, and to the statement contained therein in response to the question: 'Was a full sized model made and if so when,' and a date appears thereon April 30, 1926. Does that tend to refresh your recollection as to when you made your first model of this device?")

Mr. Huxley: Show him the memorandum.

A. Yes, it does.

Mr. Wiles: I want it clear that the witness is now testi-[fol. 301] fying from his present recollection and not from what is on a paper but what he now remembers independently of any paper at all.

The Court: This is asked you, if this refreshes your recollection so you know not from what is stated here but

from your refreshed recollection so you can state?

A. I was trying to recall some incident that would knit together a definite date there. I know that I mentioned to Mr. Jessop and to Mr. Johnson the fact that I had a device in mind, and they suggested that I get to work on it immediately. That was I know in very cold weather. It was around the first of the year, and I immediately started to work on it. Whether that was 1927 or 1926 or 1925 right now it would be very hard for me to say. I would have to go back and get some correspondence out to know just when I went to the Central Stamping Company, and the date that Jessop became financially interested in it, and the date on which I left, but I do recall this when Mr. Jessop asked me to fill this out for the patent attorney.

By Mr. Byrne:

Q. That is, you mean Exhibit 29 for identification?

A. That's correct. I remember filling that out, and I told him that I was going to put on the absolute actual date, if anything favor it to you.

Mr. Wiles: I object to that.

By Mr. Byrne:

Q. Does that paper, Exhibit 29, now refresh your recollection with respect to when you made your first model, or does it not?

A. It does. It must have been in 1926.

[fol. 302] By Mr. Wiles:

Q. Was that a conclusion or do you actually remember it now as being 1926?

A. Well, I remember it now as being 1926, yes.

Q. You did not remember that way when you began to testify. You remembered it as 1927.

A. I remember I made the device in 1927 it was.

By Mr. Byrne:

- Q. Mr. Jessop I think you said took over the Central Stamping Company before December 27, 1926, which is the date of the paper, Exhibit 30, did you not?
 - A. Yes.
 - Q. He took it over at that time?

A. He took it over in December, 1926, according to that paper there.

Q. Well, according to the paper, but you said in fact he

had taken it over, came to you before that time?

A. Yes, he had invested money in the company to the extent of buying tools and dies.

Q. The device was marketed after that time, was it not?

A. It was.

Q. Will you look at the sheet which I tender to you and state whether or not you can identify that?

A. Yes. I wrote the instructions.

Q. And what do the instructions relate to?

A. They relate to the operation and care and maintenance of the light.

Q. Of the lighter that you have devised, is that it?

A. That's right.

Q. Do you know about when that leaflet was put out?

A. Well, that must have been in the latter part of 1927.

Q. That's what you believe it to be anyway?

A. Yes.

Q. But it is a paper you had to deal with about that time and it does relate to the cigar lighter which you devised?

A. That's right.

[fol. 303] Mr. Byrne: I offer in evidence that paper last identified by the witness as Plaintiff's Exhibit 32.

The Court: It may be admitted.

(The exhibit was so marked.)

By Mr. Byrne:

Q. Have you here one of the devices which you did make up at some time or another?

A. Yes. That device right there is the first model that I made that I would care to submit to anybody.

Q. And is that a model which has been in your possession since it was made?

A. That's correct.

Q. And you got it out comparatively recently?

A. I took it home to keep for sentimental reasons. I had it laying around the house and last fall my wife was going to throw it out and I salvaged it.

Q. Tell me, is that a machine made device or a hand made device?

A. It is a machine made device, that is, the parts are machined.

Q. Yes.

A. But this knob is one that I afterwards put on after I got my Bakelite part made, but this part of the device here (pointing).

Q. When you say "this part of the device," please designate it so we will have a record that will mean something.

A. I don't know what you would call it. It is the mechanical part of the device was manufactured by hand.

Q. By that you mean the part which appears here in

brass or copper?

A. That's correct. Every part in it was manufactured, machined by hand. In other words, I mean I did not have production tools.

Q. At the time you made this?

A. That's right.

Q. And this particular device has been in your possession ever since it was made?

A. That's right.

[fol. 304] Q. Can you give me an approximation of the time when you made this particular device?

A. It was a long time ago.

Q. It was a long time ago?

A. But that device there was one that was submitted to General Motors for their approval and Mr. Fisher and Harry Earl had a lot of fun playing with it, and that was back—I believe that was in the fall of 1927 that I made that device, that model there, rather.

Mr. Byrne: I offer in evidence the device identified by the witness and ask that it be marked Plaintiff's Exhibit 33.

The Court: It may be admitted.

(The exhibit was so marked.)

By Mr. Byrne:

Q. Mr. Mead, I am tendering to you some papers which have come to my attention, some of which are on the letter paper of Central Stamping Company, and I will ask you to examine particularly the first few sheets and state whether or not you are familiar with them and whether or not they help you in any way to fix the time when you made your first model.

(Sheets of paper handed to Mr. Wiles who examines same.)

Mr. Wiles: I cannot tell what this means.

A. These are invoices where we invoiced Mr. Jessop the tools I mentioned a short time ago where he financed the tools on this two-in-one button, which was a new device we were putting on the market at that time, and that gave us the necessary working capital to put the product out, incidentally under his trade-mark.

[fol. 305] By Mr. Byrne:

Q. You say you put out what product?

A. This two-in-one-horn button. That was in August, 1926.

By the Court:

Q. How is that related to this model?

A. Well, we manufactured a line of horn buttons and cheap accessories principally for the Model T Ford, as I had several ideas which were new at that time, but I did not have the finances to manufacture them, and I disclosed that to Mr. Jessop and he said he would furnish the necessary funds to do the job if we would give him exclusive sales rights.

By the Court:

Q. But what does that have to do with this model?

A. This cigar lighter, your Honor?

Q. Yes.

A. Well, it was at that time, it was in 1926 that Mr. Jessop became financially interested in the company to that point where I had confidence enough to disclose the cigar lighter to him.

By Mr. Byrne:

Q. Did you do so by that time?

A. I did.

Q. And "by that time" what time do you refer to?

A. It was prior to this.

Q. And "prior to this" means what?

A. August 6th here.

Q. What year?

A. 1926. He said, I remember now, that that would be the next item that we would manufacture, if we did. We

concentrated our efforts on the cigar lighter.

[fol. 306] Q. And had you built a model by the date that you refer to, that is to say, does this paper tend to refresh your recollection as to whether you had your model by the date of August, 1926?

A. That was invoices for tools that had already been

made.

Q. For what purpose?

A. For the two-in-one lighter.

Mr. Wiles: Two-in-one born button you said.

The Witness: That's correct, but because the tools would have to be made before we could build them for them.

By the Court:

Q. Is the two-in-one button related to the lighter?

A. Only in so far as it refreshes my memory to the extent that we must have had the tools even by August for the two-in-one button, which would leave me available to work on the cigar lighter.

By Mr. Byrne:

Q. It does not give you when you had your tools ready for—

A. The cigar lighter?

Q. Yes, or even for your model?

A. I did not make any tools for the model.

Q. But you had tools you could make the lighter with, is that it?

A. Not until the following year.

Mr. Byrne: I ask that this bill be marked for identification, consisting of two sheets, Plaintiff's Exhibit 34.

The Court: It may be admitted.

(The exhibit was so marked.)

Mr. Byrne: You may cross examine, Mr. Wiles.

[fol. 307] Cross-examination.

By Mr. Wiles:

Q. Now, I want to get just as clear as I can from this last testimony. Some time before August, 1926, not long

before, Jessop became interested in the company, is that right?

A. You said Jessop became interested in the company

just before August, 1926?

Q. You said he financed these tools that are shown in the last exhibit.

- A. Mr. Jessop was our sales representative, he was at the time that I went with the company as an employee, and that was in 1922 or 1923. Mr. Moyers owned the company at that time.
- Q. Well, you said it was about the time of these last invoices that you looked at, August, 1926, that Jessop put some money in?

A. That's correct.

Q. And it was at that time that you got confidence enough in Jessop's interest in the business to tell him about this lighter, or just about that time?

A. Perhaps it would be better if I gave you a little more

of the history of the company.

Q. I wonder if you can't answer my question. That's what I thought you said.

A. That's correct. I did say that.

Q. So it was about August, or a little before August of 1926 that you told Jessop about this?

A. No. It was the fore part of 1926.

- Q. Well, I am trying to get at the hook-up of these last invoices that you looked at which you said refreshed your recollection?
 - A. That's so.
- Q. As I understood the state of your memory then, it was that it was about the time that Jessop put his money in?
- A. It was that time that he actually put the money in, although he agreed to put the money in before that time.
- Q. Well, as I understood it was a short time before that he agreed to put some money in?

A. That's correct.

[fol. 308] Q. And it was after that agreement, that is just about August, or a little bit before, that you told Jessop about the new idea on the lighter?

A. Yes. It was before August that I told him about the

lighter.

Q. Well, not very long before.

A. It was in cold weather I told him. I remember very well coming back from the restaurent across the street and it was very very cold, Mr. Johnson, Mr. Jessop and myself.

Q. You put it much earlier in 1926 than August that

you told Jessop about it?

A. Yes, I did tell him about it earlier than August, 1926.

Q. Now, before you came here to testify you went all over this with Mr. Huxley and Mr. Byrne, didn't you, to refresh your recollection as well as you could?

A. Not to any great extent. I did not know anything

about the case until a week ago.

Q. But I mean after you came here you consulted them about it and talked about what your testimony was going to be, didn't you?

A. They merely asked me to look at some of the papers

and see if I recollected any of them, and the date.

Q. Yes. And they asked you to produce these papers, didn't they?

A. What papers?

Q. Didn't you have anything to do with the producing of these papers?

A. I did not have any of these papers.

Q. They had them when you came here?

A. That's right.

Q. Well now, this bill of sale by the trustee was gone over by you before you came here, was it not?

A. I merely scanned it over night before last I believe it

was.

Q. You looked that over and talked to Mr. Byrne about it, didn't you?

A. He asked me if I knew about it and I said I did.

Q. And you came here prepared to testify, did you not, that that did assist in fixing your recollection? [fol. 309] A. Well, I have been trying to set the definite dates, and it does help me to recall the definite dates, yes.

Q. But when this sheet was produced, which is Exhibit 30, and you looked at it and said that it did refresh your recollection, and you then said that the first model was made within three months after that date, didn't you?

A. I believe I did; yes.

Q. And that was then your best recollection, was it not? When you testified to it you testified, of course, according to your best judgment at the time, didn't you?

- A. Yes.
- Q. And you also told Mr. Byrne that when you went over this bill of sale with him, didn't you, the other night?
 - A. Perhaps I did, I don't recall whether I did.
- Q. Well, it had something to do with your memory at that time. That's why Mr. Byrne brought it here, was it not, that you had told him it helped you refresh your recollection?
 - A. I assume so; yes.
- Q. And you told him what you have said here about it, didn't you?
 - A. Yes.
- Q. Of course, when you told him a couple of days ago, the other night—whenever it was, you then thought you were telling him just as far as you were able to remember, didn't you?
 - A. I did.
- Q. Certainly. Now, on this matter of commercial manufacture, for how long a time was this on the market?
- A. I left the company in the fall of 1928, I know that definitely, and they were manufacturing them after I left. How long I don't know.
 - Q. Not very long!
- A. I don't imagine so, but I started the job in production and sent away the first or second shipments, I recall that.
 - Q. Shipments of how many?
- A. I cannot tell you the exact quantity. We shipped them to Chicago.
- Q. Well, a few hundred or a few thousand or a few [fol. 310] score?
- A. I imagine it was in the neighborhood of, possibly, a total of four or five hundred.
 - Q. So far as you know that's all that were ever sold?
- A. No. In talking to my partner after that Mr. Head advised me that they sold quite a quantity of them.
 - Q. What do you mean by "quite a quantity"?
- A. He mentioned that they sold a thousand because they had purchased one lot of a thousand Bakelite knobs, and they were entirely used up.
- Q. And at some time or other, not very long after you left the thing failed, didn't it, as a commercial proposition?

- A. I don't know what happened. I know they went out of business.
 - Q. They did go out of business?
 - A. Yes.
 - Q. Not very long after you left?
 - A. Within a year I imagine.
 - Q. And nobody revived this lighter for years?
 - A. I lost all track of it.
- Q. You have never seen one on the market aside from the thousand or so that were made in the beginning?
 - A. No.
 - Q. And you never heard of one having been made later!
- A. Well, outside of the following year what few there were.
- Q. Yes. Now, as to the date when this actual commercial manufacture began, I think you stated 1927, late 1927?
 - A. I believe that is correct; yes.
- Q. Now, I notice there are directions here on this Exhibit 32, and by the way it was in connection with Exhibit 32 that you fixed the date of publication as 1927, was it not?
 - A. What is Exhibit 32?
 - Q. That's the direction sheet.
 - A. That has no date on it.
- Q. I know, but you said that must have been in 1927, did you not?
 - A. Yes.
- [fol. 311] Q. Well now, that contains directions for installing on the model A Ford, does it not?
- A. 1 don't know whether it specifies model A or all models.
 - Q. Well, look at it.
- A. (Witness examines document.) We made two different models at that time, a clamp on model and this model here.
 - Q. You are not answering my question.
 - A. I was leading up to it, or trying.
- Q. The sheet, Exhibit 32, does contain directions for installing on the model A Ford, does it not?
 - A. That's right.
- Q. You know as a matter of fact that the model A Ford didn't come out until 1928, don't you? Is not that

your impression? I am frank to say I am giving it from recollection.

A. I don't know I am sure just what year the model A did come out.

Q. What makes you say that this particular Exhibit 32 must have been published in 1927?

A. Because I left the company in 1928.

Q. What time of the year?

A. I believe it was in September.

Q. Of 1928?

A. That's right.

Q. Well, this might have been published then any time up to September, 1928, might it not?

A. I was positive that I wrote the instructions myself.

Q. Well, you could have written them any time prior to September, 1928, could you not?

A. Yes, but we were in production on the model for a

year before I left the company.

Q. What I was getting at was, the thing you testified about positively was that this particular sheet was published in 1927?

A. Well, obviously you make your instruction sheet as soon as you have made your first product.

Q. Was that the only instructions you ever published? [fol. 312] A. No. There was instructions on the box.

Q. I mean did you have any other edition? Did you have an edition that did not contain these directions for installing on the model A Ford?

A. What was that?

Q. Did you have an edition or issue of these direction sheets that did not have the model A directions on it?

A. I am not sure unless it was instructions on the carton.

Mr. Wiles: I believe that is all.

The Court: Any redirect?

Mr. Byrne: Just one question, your Honor, please.

Redirect examination.

By Mr. Byrne:

Q. Have you any connection with the plaintiff company in this suit, the Automatic Device Company?

A. No, I have not.

ADAM JOHN DUNSMORE, called as a witness on behalf of the plaintiff, having been first duly sworn, testified in rebuttal as follows:

Direct examination.

By Mr. Byrne:

- Q. Will you please give your full name, Mr. Dunsmore?
- A. Adam John Dunsmore.
- Q. Where do you reside?
- A. The Carleton Hotel in Oak Park.
- Q. Chicago, Illinois?
- A. No. Oak Park. That is a suburb west.
- Q. Are you employed by a Chicago organization?
- A. Chicago Rivet & Machine Company.
- Q. For how long a period of time have you been employed by that concern?
 - A. Ten years, in round figures.
- Q. What is the nature of the business that is carried on by that organization?
- [fol. 313] A. Manufacture of tubular and split rivets and automatic setting machines pertaining to the use of those rivets.
- Q. Were you ever employed by Central Stamping Company in Detroit, or did you have any connection with that organization?
- A. It is a little difficult to define as employed. Actually, the business was originally owned by a man named Moyers. Mr. Mead was superintendent. Subsequently Mr. Mead and another man named A. J. Head took over the business. It was discovered it was in very, very bad condition financially, and they asked me to come in in an effort to pull it out. So that I was not actually a partner in the business at that stage. I was only contributing whatever knowledge or skill I might have in sales, and so forth, in an effort to pull the thing out for these two men.
- Q. Can you tell me about when you took up this association with Central Stamping Company?
- A. It is a little difficult to put my finger on that. I would say probably somewhere in 1925.
 - Q. In the year 1925?
- A. I imagine along about late 1925, but that is merely a guess.

Q. For how long a period of time did you remain with this organization?

A. Well, I was there until it was finally sold under a

trust mortgage.

Q. Will you please examine the paper which I tender to you, which has been marked Plaintiff's Exhibit 30 for identification, and state whether or not you know what that paper is?

A. I presume this records the sale of the assets of the

company to Mr. Jessop.

Q. Will you please look at the last page of that?

A. Do you mean the signatures?

Q. Yes. Does that refresh your recollection? I mean, after having looked the whole through, is that a culmination of the sale or transfer to Jessop about which you have spoken?

[fol. 314] A. That is correct. I arranged for this trust mortgage. When the company seemed to have reached the end of its rope I arranged the trust mortgage, and I think I even recall Mr. Lantry's signature.

Q. At any rate, you know of the association of Mr. Lantry

with this enterprise at that time?

A. Yes.

Q. As trustee?

A. Yes, correct.

Mr. Byrne: I offer in evidence that document which was formerly marked Plaintiff's Exhibit 30 for identification.

The Court: It will be admitted.

(The exhibit was so marked.)

By Mr. Byrne:

Q. Now, you mentioned Mr. Mead connected with the Central Stamping Company. Do you refer to the Mr. Mead who was on the witness stand just before you?

A. The previous witness, yes.

Q. While with the Central Stamping Company were you familiar with whatever was made there?

A. Very, very much.

Q. You sold some of the products, did you not?

A. I think I directly—that is, I was responsible for the sale of it all through its manufacturers' agents, of whom Mr. Jessop is referred to as one.

Q. Mr. Jessop, at that time of Chicago?

A. Correct.

Q. Did you ever know anything about a cigar lighter which was developed by Mr. Mead?

A. Yes.

- Q. Did you see him engage in the making of one of the models or one of the devices?
- A. I not only saw him engaged in the making of one of them, but I saw him engaged in the making of a number of consecutive models, and I probably held a few of the parts for him at the time.
- Q. In other words, you collaborated with him in whatever he was attempting to do in that connection? [fol. 315] A. Well, mechanics is not my forte. I am more concerned with sales, and the same was true at that time.

Q. Can you give me a general description of the device which you worked on with Mr. Mead?

A. I couldn't give you a technical description.
Q. I want just a general description of it.

A. I heard, of course, Mr. Mead's testimony, and substantially, you know, that is my recollection of it. He started off with a piece of fiber and a cup, and he had a square member running through which he engaged in a hook on the end of this thermostatic metal. That is about it. I really don't know.

Q. Would you say a thermostatic metal was used in that device?

A. Yes. I had to go out and find it for him, I think, or at least I probably did some phoning, whatever it was.

Q. Was a device made up while you were there with the company?

A. Let me say first, please, that I also remained there after the property was sold to the S. T. Jessop Company. I also remained there for a period of months after that, as a matter of fact a year, representing S. T. Jessop Company not only in the products of this activity with which I have been identified but also other items which Mr. Jessop was also representative for. I covered Michigan, Ohio and Indiana. For a period of a few months after Mr. Jessop acquired the property I handled most of the office routine between Detroit and Chicago, as well as making the outside calls, so that I hope in that way to give you the answer to my being identified prior to and after his acquiring the property.

Q. Can you, with respect to the time that Mr. Jessop took over the company, the Central Stamping Company, state whether or not a model of Mr. Mead's device was made by that time, so far as you know?

A. May I correctly understand that? Do you mean, did he make a model prior to Jessop's acquiring the property

under sale?

[fol. 316] Q. That is right.

A. To the best of my belief he made the model. That probably was some time prior to that. I could not be specific on dates. I have no data. Some time previous, I would say, he monkeyed with the thing, maybe, arbitrarily, five or six months.

Q. That was probably five or six months before the time

of the sale to Mr. Jessop?

A. That is correct. That is when he was just playing with it.

Q. After Mr. Jessop took possession of that organization by this document of December 27, 1926, you remained there for a considerable period, as you stated?

A. Yes, as a sales representative, and only contributing

sort of a contact in an office way.

Q. Were you there at a time when they began manufacturing one of these Mead cigar lighters?

A. In a capacity, yes; outside representative.

Q. You knew that they did eventually get one of the devices upon the market?

A. Oh, yes, yes.

Q. Do you know why they discontinued? Were you there at the time they discontinued the manufacture of this eigar lighter?

A. No. They were still, as far as I recall, making it at the time I entered the employ of my present connection.

- Q. When you entered your present connection, or rather when you left that old association down in Detroit, was it a strong concern financially or was it comparatively weak?
 - A. Humorously weak. Q. Humorously weak?

A. Yes.

Q. It did cost money at that time to carry on the manufacture, did it?

A. Correct.

Q. Did you see whether or not the device, which you believe was made before the sale to Mr. Jessop in Decem-

ber, which is evidenced by this paper of December 27, 1926, worked satisfactorily? That is to say, did it operate?

A. Well, it operated. There was something remaining to be done, I would say in the heat-treating, as I recall the [fol. 317] story, of the thermostatic metal. I personally presented this model and the battery and stand that Mr. Mead referred to, myself, to the Fisher Body Company. There were a number of models prior to that.

Q. That was Exhibit 33?

A. Yes, that is the one I toted around.

Q. You took that to Fisher Body Company?

A. Fisher Body Company.

Q. In Detroit?

A. In Detroit.

Q. Did you operate that device for the Fisher Body

people?

A. Yes, but as I say, because of a seeming variation due to the fact that the thermostatic springs, as Mr. Mead had explained it to me at the time, because of being hand made, had a certain variation, it might run five hundred times and operate perfectly, and about the time I got it up to Mr. Fisher, or somebody, that was the time it would not repeat quickly enough.

Q. In other words, it was a little slow in operating?

A. Well, after it had been used repeatedly a number of times. These gentlemen, of course, are impatient and they would sit there and play with it a while and it might not work. It did not seem to have a tendency to cool.

Q. But, given a chance, it would? It just would not snap right back?

A. Given a chance, it would work without any trouble.

Q. Do you remember about the time you took it to the Fisher people? Was it after Mr. Jessop took over the concern?

the first of the second second

A. Yes.

Q. Do you know approximately when it was you took it to the Fisher concern?

A. As a guess, probably along the summer or fall of that first year he had control, which, I believe, was 1927.

Mr. Byrne: That is all.

Mr. Wiles: No cross-examination.

[fol. 318] George W. Johnson, called as a witness on behalf of the plaintiff, having been first duly sworn, testified in rebuttal as follows:

Direct examination.

By Mr. Byrne:

- Q. Will you please state your full name, Mr. Johnson?
- A. My name is George W. Johnson.
- Q. Where do you live?
- A. At 5809 North Kilbourn Avenue, in Chicago.
- Q. With what concern are you associated or a part?
- A. I am in the United States Tent & Awning Company.
- Q. What is the nature of the business of that concern?
- A. Well, we are exposition, circus and carnival outfitters.
- Q. You make some tents for that purpose?
- A. Yes, indeed.
- Q. Is Mr. S. T. Jessop associated with that company?
- A. He is the president of the United States Tent & Awning Company.
 - Q. What is your office?
 - A. I am the vice president of the company.
- Q. How long have you been in your present association with the company and with Mr. Jessop?
- A. The United States Tent & Awning Company since January 2, 1930.
- Q. Prior to that time were you associated with Mr. Jessop?
 - A. Yes, for a number of years prior to that time.
- Q. What was the nature of the business that was carried on prior to that time by Mr. Jessop and you?
- A. We were manufacturers' representatives, particularly in the automotive accessory line.
 - Q. Were you operating principally here in Chicago?
- A. We maintained an office in Chicago at 219 West Chicago Avenue, and a warehouse.
- [fol. 319] Q. Do you know Mr. Mead who was on the witness stand here this afternoon?
 - A. I know Mr. Mead.
 - Q. In what connection did you meet Mr. Mead?
- A. In connection with a visit to the Central Stamping Company some time in 1925 or 1926.

Q. The Central Stamping Company to which you refer was located in what city, please?

A. They were located in Detroit, Michigan.

Q. What was that concern doing and what association did it have, if any, with Mr. Jessop at that time?

- A. Mr. Jessop at that time represented them. He was a sales agent for the Central Stamping Company, who produced automobile accessories.
- Q. What if anything do you recall regarding a cigar lighter that the Central Stamping Company was working upon at about that time, or at any time?

A. At any time?

- Q. Yes. I mean a thermostatic lighter, if they had one.
- A. Well, I have a recollection of the S. T. Jessop Company manufacturing it. I have a recollection of my having sold some of them.
- Q. Yes. Well, did you have any contact with Mr. Mead or anyone else down at the place of the Central Stamping Company at Detroit with respect to this device?

A. Yes. Yes, definitely.

Q. Well, now, did Mr. Jessop at any time take over the Central Stamping Company?

A. He did, sir.

Q. Can you identify the paper which has been marked Plaintiff's Exhibit 30?

A. I do, sir.

Q. Were you familiar with that at that time?

A. I was, sir.

Q. Pursuant to that paper did Mr. Jessop take over the assets of the Central Stamping Company?

A. I didn't get the question.

Q. I say, under that paper did Mr. Jessop take over [101, 320] the assets of the Central Stamping Company!

A. He did, sir.

Q. Now, was it prior to the execution and delivery of that paper, Plaintiff's Exhibit 30, that you learned about this cigar lighter from Mr. Mead or others at the Central Stamping Company?

A. Oh, definitely prior to that.

Q. Will you tell me, please, what you knew about the device prior to that time, which is December 27, 1926!

A. I recall a number of models that I might see in my monthly visits to Detroit, at the Central Stamping Com-

pany. As I would make my monthly visits, in the interest of getting merchandise out of there so that we might deliver the goods that we had sold from time to time, Mead would show me the developments as he was playing around with the various parts and pieces he had around there.

Q. Did you see at that time that device or part of a device (indicating), and by that I am referring to this

cigar lighter?

A. Well, I have a recollection of Mr. Mead's work bench, and like all inventors' personal benches it was cluttered up with a lot of wires and gadgets and knobs and brass parts, and a storage battery, and the like, and some heating elements.

Q. Did you see a completed device or a partly completed device? That is, did you see a cigar lighter on Mr. Mead's bench while you were at Central Stamping Company, at Detroit, at any time prior to December 27, 1926?

A. Yes, I did.

- Q. What was the state or condition of that device? That is to say, was it completed or partially completed, or what?
- A. I wouldn't say—it was not a completed device, in that it was nothing that you might offer as a piece of merchandise for sale.
 - Q. Well, what was it, a hand made device or what?

[fol. 321] Mr. Wiles: Let him testify to it. Just ask him to describe it.

Mr. Byrne: Don't worry.

The Witness: I didn't get the question.

The Court: Go ahead.

By Mr. Byrne:

- Q. I will ask it again. Will you tell me what the condition of that device was? How was it made, so far as you know?
- A. I couldn't describe that to you, other than Mead's and Head's explanation as to how it worked.

Q. Did you see it operated?

A. I did operate it.

Q. You did operate it. Did the unit heat up so that you could light a cigar or cigarette with it?

Mr. Wiles: I object to that kind of examination.

The Court: Describe it.

The Witness: The device was a heating element on the end of a plug, and you turned it in a clockwise manner and it remained in that position, and later there was a snapping noise and it apparently moved. The lighting device or the heating element was incandescent, and you could light a cigarette with it or char a piece of paper with it.

By Mr. Byrne:

- Q. After this period of December 27, 1936, did you have to do with the sale of this device?
 - A. I did, sir.
- Q. Will you please look at the paper which has been marked Exhibit 32 and state whether or not you know what it is?
- Q. Without reading it word for word it is an instruction for the installation of an Automatch lighter.

[fol. 322] Q. Was that used in connection with the sale of this device?

A. This was inserted in the container in which the device was packaged.

Q. Can you tell me whether or not this is a package

in which the lighter was packaged?

A. Yes, that is definite. That is correct, and I know where it was made. It was made by the Randolph Box & Label Company in Chicago.

Mr. Byrne: I offer in evidence the package, the carton, identified by the witness, and ask that it be marked Plaintiff's Exhibit 35.

The Court: It may be received.

(The exhibit was so marked.)

By Mr. Byrne:

- Q. Now, did you succeed in making any sales on the cigar lighter to, say, Montgomery Ward & Company?
 - A. Yes, sir.

Q. Was this lighter carried in the catalog of Montgom-

ery Ward & Company, do you know?

A. Yes. It was assigned a stock number. I think that the automobile division or part of Montgomery Ward is division 61, and the preface number would be 61- something or other.

Q. Will you please turn to this photostatic copy of a page from the Montgomery Ward & Company catalog, page 653, and state whether or not this cigar lighter is illustrated there and referred to?

A. Yes, it is. It is item 6106731. That is Ward's cata-

log number.

Q. Will you please glance at that page, 653, and particularly with respect to the written matter under the cut of this device, and state whether or not it is indicated that it is for a Ford automobile?

The Court: I think I can see that, without his testimony. [fol. 323] Mr. Byrne: All right, your Honor. Have you any objection to my offering a photostatic copy?

Mr. Huxley: No. That is covered by stipulation.

Mr. Byrne: I offer in evidence the front page and page 653 of the Montgomery Ward & Company catalog No. 109, covering the period for the fall and winter 1928 and 1929, with the consent of my good friends on the other side.

Mr. Schroeder: That is Plaintiff's Exhibit 36.

The Court: It may be admitted.

(The exhibit was so marked.)

By Mr. Byrne:

Q. Now, will you please examine cursorily, if any examination is required, the device which I tender to you, and state where that has been?

A. That has been in the office, or rather the personal safe of Mr. Jessop.

Q. Have you seen it there from time to time?

A. I have from time to time. He and I, I should say, share that fire safe jointly, and this has been in his possession all that time at 701 North Sangamon Street in Chicago. That is, since 1930.

Q. You have seen it there from time to time?

A. I have.

Q. What was the purpose of having it made up in this fashion, mounted like this?

A. My recollection is that it was one of the first models, one of the first working models that Mead turned out, and he wanted to make a desk set of it, and an ashtray device and lighter.

Q. At any rate, this particular device has been in your office here in Chicago for a large number of years? Since about when?

A. It has been at the Sangamon Street address since 1930, and prior to that at 219 West Chicago Avenue. [fol. 324] Q. That dates back to, did you say 1931, or earlier?

A. No. We occupied the premises at 219 West Chicago

Avenue up to January, 1930.

Q. Can you give me an approximation of about the number of the devices exemplified by these devices which are here as exhibits, which were sold by your company?

A. Only approximate.

Q. Can you give me an approximation?

A. Possibly fifteen hundred or two thousand.

Q. Do you know why Mr. Jessop discontinued the manufacture of the device?

A. Yes, I can explain that to you, probably at a little length.

Q. Well, all right.

A. The previous testimony which I have heard here is correct, and that is that it was a struggling company. Let me explain that the S. T. Jessop Company as manufacturers' agents, represented a number of manufacturers in the automotive line, among them being the Central Stamping Company, and the Central Stamping Company got into difficulties. We had some of the products of Central Stamping Company cataloged with such concerns as the Western Auto Supply Company, Montgomery Ward, and Guarantee Tire & Rubber Company, and when the Central Stamping Company failed to deliver the goods that we had sold, it was up to the sales representatives to protect our good name with the customers, inasmuch as we were selling them other products. That was the reason for Mr. Jessop's putting money into the company, primarily to satisfy and to fill orders that he had sold in good faith, and then later buying the company outright.

Having been sales agent for a number of years in the automotive line, and the automotive line going through a series of growing pains, where we would be rich one year and thin the next, we were looking for a different type of business, a business with more stability and some-[fol. 325] thing where we were directly concerned with the manufacture of articles. That is the reason he and I ac-

quired the United States Tent & Awning Company, which is a rather large company. We couldn't give any more of our time to this Jesco Products Company and what was left of the old Central Stamping Company, so we decided that we would get rid of it. In other words, that company that we became interested in was so much greater and larger that we thought we could not devote our time to both, and we just sold out.

Q. When Mr. Jessop took over the Central Stamping Company the name under which they carried on the manu-

facture down there was changed?

A. Yes.

Q. To what, please? Jesco Products Company?

A. It was the Jesco Products Manufacturing Company.

Q. Now, just to satisfy myself on one point before I stop, I believe you have testified that it was before December 27, 1926, that you had contact with Mr. Mead there in Detroit?

A. Yes, sir.

Q. And that you knew about his device before that time?

A. Yes, sir.

Q. And that you operated one of his devices on his work bench before that time?

A. Correct.

Mr. Byrne: I offer in evidence the lighter which the witness testified has been at his office for a considerable period of time, and will ask that it be marked Plaintiff's Exhibit 37.

The Court: It will be admitted.

(The exhibit was so marked.)

Mr. Byrne: That is all.

Cross-examination.

By Mr. Wiles:

Q. Are you able to say that this device came on the market earlier than 1928?

A. I don't believe so, no. No, sir.

[fol. 326] Q. Mr. Mead testified that that direction slip, I believe it is Exhibit 32, this thing (indicating), was published in 1927. Now, that could not have been until 1928, could it?

A. I don't believe so. I don't believe so, no, sir, for the reason that the printing was handled out of the Chicago office and then we shipped to Detroit and they were packaged over there.

Q. Isn't it your recollection that the Model A Ford did

not come out until that year, 1928?

A. Well, I have a recollection of getting thin waiting for Ford to bring out a new model, and that directly affected our business over there. As to the year, I am not definite, sir, whether it was 1927 or 1928. But among the other items we manufactured were contrivances and accessories for the Ford car, and the Ford Motor Company was shut down for possibly a period of six months, or possibly a year, before they got into production on the new car. I am not definite as to what year, sir.

Q. This Montgomery Ward catalog is the winter of 1928-1929. Did you get a cataloging by them about as early as

it came out?

A. I beg your pardon?

Q. Did you get Montgomery Ward to take it up about as soon as it came out?

A. To accept it and list it, sir?

Q. Yes.

A. I don't believe so. All of my experience in selling Montgomery Ward is that the devices are submitted to some department for approval and for testing, and on other items it has been a period of possibly a year or a year and a half or two years before we are able to sell them. I refer now to that horn button device and that two-in-one button.

Q. Well, if that was catalog-ed in the fall of 1928 they must have had it about the spring of 1928 to go over it.

A. I would say yes, they would need at least six months to work on it in order to get it in the book.

Q. So they must have started investigation very quickly

[fol. 327] after you began to manufacture it?

A. Very likely, yes. It would be the first source we would go to to try to get a volume sale.

Q. Now, when this Jesco Products—let me put it this way. You decided it was better to liquidate that company and devote yourself to something else, is that correct?

A. That is correct. There was not sufficient income from the business to warrant our neglecting the affairs of the United States Tent & Awning Company. In short, we could not be both in Chicago and Detroit, so we decided to sell and we just sold all of the machinery and equipment and disposed of the business. We did carry, however, in Chicago stock some of the items that we had manufactured, and shipped them to the various accounts until such time as the stocks were exhausted.

Q. The people who bought on your liquidation did not

want to go ahead with this manufacture?

A. The liquidation was in the form of merely disposing of the machinery to an individual who, I believe, took it to Wichita, Kansas, and installed it in a factory down there, the various lathes.

Q. For making something else?

A. Making something else, yes.

Q. There was not a sufficient sale of this thing to justify somebody else in wanting to go ahead with it as a business?

A. I beg your pardon?

Q. There was not any such sale of this Mead lighter as would justify anybody else wanting to go ahead with it as a business?

A. Well, that is hard to answer. This all happened in 1930 and everything was tumbling around our heads, and there was a condition at that time where nobody knew what the market would be and nobody knew what the future would hold. Our decision to dispose of that Detroit plant was caused by what happened in the fall of 1929 when the market crashed, and at that time we thought we would [fol. 328] get rid of the thing. So, to answer the question as to the sale, I have reason to believe that had the item been properly advertised and displayed, and had money been spent on sales promotion, the item would have continued to sell.

Q. Well, you had real good business for the first year that you had this?

A. I wouldn't say good business from the standpoint of the volume.

Q. Well, I mean business conditions were good up to the fall of 1929. The biggest boom we had was on from the fall of 1928 to the fall of 1929.

A. Excepting, sir, let me enumerate the items that we made in Detroit; namely, a horn button that was for the Ford automobile Model T, a two-in-one horn button which

was made for the Model T, ash-trays which were made for the Ford car. Then Mr. Ford in 1927 or 1928, I don't know, decided to discontinue the manufacture of that Model T, and as a consequence the market and the demand fell off for these specialties that we were making for that Model T Ford.

Q. I understand, that naturally would, but this cigar lighter thing had nothing to do with the Ford Model T,

particularly? It would go on any car, wouldn't it?

A. To answer your question, there was not sufficient volume at the time on the lighter to warrant our continuing to put more money in that Detroit thing.

Q. That would have been true for anybody. The volume was not there then.

The Court: I think that is argument.

Mr. Wiles: I am asking him. He knows the sales.

The Court: He says there was not sufficient for him. I don't know how he can answer for any body else.

Mr. Wiles: All right, that is all. Mr. Byrne: I have one question.

[fol. 329] Re-direct examination.

By Mr. Byrne:

- Q. Mr. Johnson, have you any connection with the plaintiff company in this case, the Automatic Devices Corporation?
 - A. No, I have no connection.
 - Q. Where is Mr. Jessop today, if you know?
 - A. Mr. Jessop is at his home.
 - Q. He is ill, is he not, today?

A. Yes.

Q. Probably will be available tomorrow morning?

A. I spoke to his wife this noon. She said very likely he would be at his office tomorrow.

Q. Have you any connection with the Casco Products Corporation?

A. None whatsoever.

Mr. Byrne: That is all. .

I would like to ask Mr. Mead one question. That may be done, with your Honor's permission, from where he is.

HERBERT E. MEAD, resumed the stand for further examination:

Direct examination.

By Mr. Byrne:

Q. Mr. Mead, where is Mr. A. J. Head now?

A. He is home ill.

Q. He has been ill for a considerable period of time, five or six weeks?

A. No, he has not been down to work for about eight weeks.

Q. He has not been to work for about eight weeks?

A. That is right. He had a very bad bronchial condition.

Q. A bad bronchial condition?

A. That is right.

Q. He was at home when you left to come up here?

A. That is right.

Mr. Byrne: That is all. Thank you.

[fol. 330] We desire to call Mr. Jessop, if we can. He is lying home ill, but he will be very short in the morning. I think we have two witnesses who will be very short after that.

The Court: You cannot use them this afternoon?

Mr. Byrne: I don't know. Maybe we can.

Mr. Huxley: May I confer with counsel for a moment?

The Court: Yes, I will want to adjourn promptly at five o'clock.

(Whereupon a recess was taken.)

The Court: You were speaking about Mr. Jessop. I was wondering, if it is merely corroborative and is not going to be controverted——

Mr. Wiles: I don't know what he will testify to. Mr. Byrne, can you say what Mr. Jessop will testify to? Maybe we can stipulate.

The Court: If it is merely corroborative, if it is not going to be controverted, the original testimony is in.

Mr. Byrne: This is off the record.

(A discussion was had off the record.)

Mr. Wiles: I think you better call him. Mr. Byrne: It will be very, very short.

[fol. 331] IN THE DISTRICT COURT OF THE UNITED STATES, FOR THE NORTHERN DISTRICT OF ILLINOIS, EASTERN DIVISION

In Equity. No. 16,188

THE AUTOMATIC DEVICES CORPORATION, Plaintiff,

VS.

SINKO TOOL AND MANUFACTURING COMPANY, Defendant

Deposition taken on behalf of the plaintiff, pursuant to order of court, at 5733 Kenmore Avenue, Chicago, Illinois, on Thursday, March 23, 1939, at 3:00 o'clock p. m., before Alice M. Rankin, a Notary Public in and for Cook County, Illinois.

Present: Thomas J. Byrne, Esquire, representing the plaintif; Russell Wiles, Esquire, and Bernard A. Schroeder, Esquire, representing the defendant.

Whereupon the following proceedings were had:

Sidney Thomas Jessop, called as a witness on behalf of the plaintiff, having been first duly sworn, testified as follows:

Direct examination.

By Mr. Byrne:

Q. 1. Will you please give your full name?

A. Sidney Thomas Jessop.

[fol. 332] Q. 2. Where do you reside?

A. No. 5733 Kenmore Avenue.

Q. 3. Chicago. Illinois?

A. Chicago, Illinois, County of Cook.

Q. 4. Are you in business at Chicago?

A. I am.

Q. 5. What is your business?

A. I am president of the United States Tent & Awning Company.

Q. 6. Where is your place of business located? A. 701 North Sangamon Street, Chicago, Illinois.

Q. 7. Did you ever have any dealings or control or ownership of Central Stamping Company, of Detroit, Michigan, and if so, please state what it was.

A. Central Stamping Company was a predecessor of the Company which I bought at a trustee's sale in 1926. I believe there is a certificate of the original trustee's bill of sale which is an exhibit here.

Q. 8. Will you please look at the paper which I now tender you, and state whether or not that is the paper to which you

referred?

A. Yes.

Q. 9. The paper which I now tender you is one that was heretofore marked Plaintiff's Exhibit 30. Is that document dated?

A. This document I had in my possession, in my private safe, and has been there ever since the date of the sale, ever since the sale was made, this and others. It is dated the 27th of December, 1926.

Q. 10. Pursuant to that bill of sale you acquired the effects

of that company, Central Stamping Company?

A. That is correct.

Q. 11. Did you carry on the business of Central Stamp-

ing Company after December 27, 1926?

- A. Only for a few days, and changed it over to the Jesco Products Manufacturing Company, that being a trade name we had on certain products we were making or having made to sell in the automotive field.
- Q. 12. Did you know a man by the name of Herbert E. [fol. 333] Mead while you were associated with the Central Stamping Company?

A. I did.

Q. 13. By the way, prior to December 27, 1926, had you had contact with the Central Stamping Company?

A. Many times.

Q. 14. What was the nature of that contact?

A. They were manufacturing items for us, in fact, they were items that were listed in certain catalogues and which we were bound in duty to deliver, such as the two-in-one horn button and other items. They made the tools and dies for us, the Central Stamping Company, and then continued to manufacture these items for us.

Q. 15. Did you have a business at Chicago at this early time prior to December 27, 1926?

A. In Chicago, yes, sir; S. T. Jessop Company.

Q. 16. What was the nature of the business conducted by this company?

A. Manufacturer, as well as agent, for the automotive field.

Q. 17. Did you ever have any contact or learn about a cigar lighter that Mr. Mead worked on?

A. Yes, sir.

Q. 18. Will you please state in your own way what you knew about that?

A. Well, in the course of manufacturing these items it required our making trips to Detroit several times and on one of those particular trips the subject of the cigar lighter was broached by Mr. Mead to the effect of, how would we like to have a lighter that would snap on and off automatically, so that one would not have to press the lighter on the dash into contact and would still leave his hands free on the wheel? I at that time did not believe anything like that could happen, but Mr. Mead seemed so serious in his contention that it could be made, we told him to go ahead and make one and let us see the model.

Q. 19. Did you see the model?

A. Later, about two months later, he did have a model, [fol. 334] sir. I went over to Detroit about two months later, saw him working on a model, saw him cutting off pieces of brass tubing, and asked him what that was. He said it was to make a socket with, or a plug to insert in the socket. He at that time had a model connected up to an old storage battery on a bench, and at that time I did see the thing snap on and off automatically and saw him light a cigarette from that particular model.

Q. 20. Did you have to remove a part in order to get

your light?

A. You did. He turned the thing in his hand and had a watch or an old clock standing on the bench and said, "Now, Sid, if you will wait a minute, or half a minute, you will see that thing snap off." I saw the thing snap off and he took it out of the socket and lighted his cigarette with it.

Q. 21. Did you ever light a cigarette with it?

A. No, because I do not smoke.

Q. 22. Can you tell us approximately when it was you

saw this model that you have described?

A. Yes; it must have been early in '26, because there was a funny coincidence on that thing. We walked into the place and it was very co'd. I remarked to Mr. Mead, and I believe Mr. Dunsmore v as present, that they ought to get more stoves fixed up and get more heat. Now that I was con-

nected with the thing I did not want any of the employes to get sick or anything like that so we could not get out items to supply our orders.

Q. 23. About when was that, Mr. Jessop?

A. That was either March or April.

Q. 24. Of what year?

A. '26.

Q. 25. Of the year 1926?

A. That is correct.

Q. 26. Did you have contact with that device after that time, that is to say, that model or any development therefrom from that time on?

A. Yes, from that point on we started to make several models to get the thing perfected, and eventually the thing was commercialized.

[fol. 335] Q. 27. Did you have to do with the commercialization of the device?

A. We marketed it.

Q. 28. You marketed it?

A. Yes, sir; it was called the Jessop Automatch.

Q. 29. I tender you a document which has been heretofore marked Plaintiff's Exhibit 32, and ask you whether or not that is a leaflet that was put out in connection with the device which you marketed?

A. That is correct. That was the leaflet that went in

with the device, instruction sheets.

Q. 30. Do you know about when these instruction sheets were put out, have you some estimate as to that time?

A. Well, it must have been in '27.

Q.31. Will you please look at the knocked-down carton which I tender you, which carton has been heretofore marked Plaintiff's Exhibit 35, and state whether or not you can tell what it is.

A. That was the carton which enclosed the lighter. That went in there and the lighter was boxed and shipped to the customer.

Q. 32. You mean Plaintiff's Exhibit 32?

A. The Jessop Automatch lighter.

Q. 33. And your instruction sheets?

A. Yes, sir.

Q. 34. To whom did you sell any of the lighters when you commercialized it?

A. Sold Montgomery Ward, Western Auto Supply and the rest of the chain stores dealing in automotive parts.

- Q. 35. Do you know whether or not your device, the one about which we are speaking, was listed in the catalogue of Montgomery Ward & Company?
 - A. It was.

Q. 36. Will you please look at the pages of the catalogue which I tender you, and particularly the cover page and page 653, and state whether or not your device is the device illustrated and referred to on one of those pages, the cover page or page 653?

A. Yes, sir; it is right here, called the Automatic Lighter.

There is the shape of it and the identical item.

[fol. 336] Q. 37. That is on page 653 of that catalogue?

A. That is on page 653; evidently this is a photostatic copy.

Q. 38. Yes, that is a photostatic copy. For what year?

A. Fall-winter, 1928-1929.

Q. 39. Approximately when would you say, with respect to the coming out of this catalogue of Montgomery Ward, that you brought the lighter to the attention of Montgomery Ward & Company?

A. About six months prior to that. They work on their catalogues about six months in advance, sometimes longer.

Q. 40. Sometimes longer?

A. Yes, sir. In other words, they had to make a test of this particular lighter, because they would go to the trouble of doing that to see that it was commercially perfect.

Q. 41. Is that the practice of Montgomery Ward & Com-

pany?

A. It certainly is, so far as I know.

Q. 42. Have you ever had contact with them before or after this incident about which we are speaking which leads you to understand that that is the practice of Montgomery Ward & Company?

A. Yes, I know when the Jessop button came out they tested the thing for maybe eight or nine or ten months before they even thought of putting it in their catalogue

for sale.

Q. 43. Do you know yourself why that device snapped on and off which you saw on the bench at Central Stamp-

ing Company, Mr. Jessop?

A. Yes, I knew why it snapped off, because he took it apart and showed me the thermostatic switch in there, which raised up when it got hot, and came back when it got cold, it came back again, when he raised up this little catch or knob it would snap off and removed the catch.

Q. 44. I tender you a device which has heretofore been marked Plaintiff's Exhibit 32, and will ask you to state whether or not you can identify that device?

A. Yes, sir; that has been in my possession for a good

many years. It was made for my desk.

[fol. 337] Q. 45. Is it one of these Mead devices?

A. One of the Mead devices.

Q. 46. About how long would you say you had that on your desk?

A. Well, I have not had it on my desk all that particular

time.

Q. 47. But around your place?

A. In my possession.

Q. 48. In your possession?

A. Yes, sir; I would say that was made up in '27 or '28, I am not sure, sir.

Q. 49. But it has been in your possession ever since?

A. Yes, sir.

Q. 50. Will you please look at the device which I tender you, which has been heretofore marked Plaintiff's Exhibit 33, and state whether or not you have ever seen that before?

A. I have.

Q.51. What do you know about that device?

A. This particular device was taken by Mr. Mead and myself to a Mr. McManus' office, in the General Motors Building, Detroit, and demonstrated to Mr. McManus, who said at that time that he had contact with a Mr. Earle, who represented, I don't know, some official of General Motors, represented himself to be some official of the General Motors Company. In Mr. McManus' office the item worked perfectly and Mr. McManus was very much enthused and was to submit the device for further test to Mr. Earle, and from Mr. Earle it was to go to Mr. Fred Fischer for final approval for standard equipment on the General Motors cars. What happened to it after it left the possession of Mr. McManus, I am unable to state.

Q.52. Was it used for standard equipment on cars, was

the order obtained?

A. No, sir.

Q.53. Will you look at the set of papers I tender you, which have been heretofore marked Plaintiff's Exhibit 31, and state whether or not you have ever seen those papers before?

A. Yes, sir; these are the claims of Mr. Mead, or the papers requested by our patent attorneys at that time. [fol. 338] I know his name was Pineles, or something like that.

Q. 54. Of Cromwell, Greist & Warden, of Chicago?

A. Of Cromwell, Greist & Warden, of Chicago.

Q. 55. They were your patent counsel?

A. They were our patent counsel.

Q. 56. You had these papers written up by Mr. Mead so you could take them to the Patent Office?

A. That is correct; yes.

Q. 57. Do you know about when that paper was pre-

pared? I mean roughly?

A. Well, it says on here, August 6th, 1927, but I believe Mr. Mead must have worked on that quite some time preparing that, long prior to that, because I understand Mr. Johnson—I do not mean your Mr. Johnson—George W. Johnson went over the papers and helped him write up some of these descriptions stated in there.

Mr. Wiles: That is objected to as hearsay.

Q. 58. At any rate, the papers embraced within Plaintiff's Exhibit 31 are those which were obtained to help patent counsel prepare the application for patent; is that it?

A. That is correct.

Q. 59. Have you any interest in the plaintiff in this suit, the Automatic Devices Company?

A. No, sir.

Q. 60. Have you any interest in Casco Products Corporation, of Bridgeport, Connecticut?

A. No, sir.

Mr. Byrne: That is all.

Mr. Wiles: No cross-examination.

(Deposition closed.)

By agreement of counsel for the respective parties to the above entitled cause, the signature of the witness to the foregoing deposition was waived.

[fol. 339] Notary's Certificate

STATE OF ILLINOIS,

County of Cook, ss:

I, Alice M. Rankin, a Notary Public in and for the

and qualified and authorized to administer oaths and to take and certify depositions, do hereby certify that in the equity cause pending in the District Court of the United States for the Northern District of Illinois, wherein The Automatic Devices Corporation is plaintiff, and Sinko Tool and Manufacturing Company is defendant, No. 16,188, I was attended at 5733 Kenmore Avenue in the City of Chicago, State of Illinois, on Thursday, March 23, 1939 by counsel for the respec-ive parties as appears above, and by Sidney Thomas Jessop, the witness named in the foregoing deposition that said witness being of sound mind and lawful age, was by me duly sworn to testify to the truth the whole truth and nothing but the truth in said cause and thereupon he testified as appears in the foregoing deposition and that counsel for the respective parties waived the signature of the witness to his deposition; that said deposition was taken stenographically by me, in the presence of said witness and at the time set forth. and that all was done in the presence of counsel for the respective parties.

I further certify that the foregoing is a true and correct transcript of all proceedings reported by me at the

time and place above indicated.

I also certify that I am neither of counsel nor attorney to either of the parties to said suit; that I am not an employee of either counsel or either of the parties to said suit, nor interested in the outcome of said cause, and that I have retained said deposition for the purpose of [fol. 340] sealing up and directing and speedily and safely transmitting same to the said court for which it was taken.

Witness my hand and seal as such Notary Public at

Chicago, Illinois, on this 24th day of March, 1939.

Alice M. Rankin, Notary Public. (Seal.)